AMERICAN AGRICULTURIST.

Designed to improve all Classes interested in Soil Culture

AGRICULTURE IS THE MOST HEALTHFUL, THE MOST USEFUL, AND THE MOST NOBLE EMPLOYMENT OF MAN—WASHINGTON

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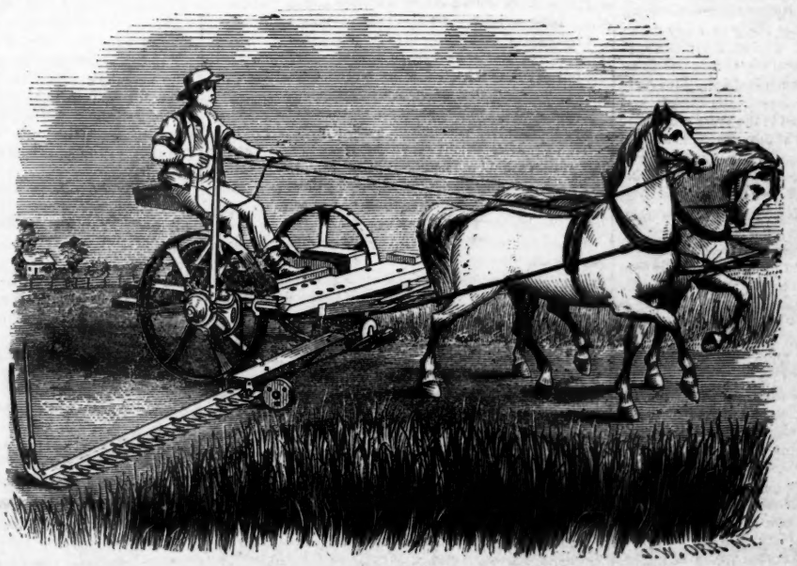
☞ **Contents, Terms, &c., on page 224.**

July.

Hark! where the sweeping scythe now rips along;
Each sturdy mower emulous and strong;
Whose writhing form meridian heat defies,
Bends o'er his work and every sinew tries,
Prostrates the waving treasure at his feet,
But spares the rising clover short and sweet.
Come Health! come Jollity! light footed come;
Here hold your revels, and make this your home.

BLOOMFIELD'S FARMER'S BOY.

Was there ever a more charming sight than the blooming meadow, as it greets the eyes of the mower on this bright Summer morning! See the broad expanse of flowering grasses, each beautiful after its kind; the purple plumes of the herds-grass, the delicate spray of the red-top and the furze, the white-caps of the clover, nestling in the under growth, and all glistening with crystals of dew—a more glorious array than ever adorned a bride of the Orient. No wonder that he pauses as the sun comes over the hills, and sighs that so much of beauty must go down before the remorseless scythe, like the dissolving views in some scene of enchantment. There is a melancholy cadence in the ringing of his steel, as he sharpens it, for it sounds the death-knell of the flowers, the butter cups, and the wild geraniums, the blue iris, and the red and yellow lilies, and the thousand beautiful creations that dwell with the grasses. This is the esthetic view of the hay field, very appropriately taken at sunrise, when all the senses are refreshed by recent sleep, and are keenly alive to the sweet influence of Nature.



As the sun advances to the meridian, and the scythe grows weary of its work of destruction, we fall into a more utilitarian mood. How long shall human muscles strain over the scythe, in the fiercest heat of the Summer? Of the millions of acres devoted to the hay crop, not one in fifty is yet cut by horse power. For some ten years, our most skillful mechanics have been at work solving the problem of the mower, endeavoring to transfer to brute muscles, this most exhausting labor of the farm. Machines, strong, durable, effective, easily worked, and economical, have been abundantly tested, and are found to be almost everything desirable. A pair of horses will readily do the work of eight men with their scythes. The horse mower and reaper put the hay and grain harvest in the power of the farmer, so that he can cut and gather them, at the best season of maturity, and in the best condition. And yet but a small part of the farming population are waked up to their value. There are tens of thousands of cultivators that would save the cost of a mower in a single season, and yet they hesitate to make the investment.

How long shall farmers be content with the present small yield of hay, and grass? These are less than a third of what might easily be gained from the same area. Of the land devoted to pasture, it too often takes four acres to carry a cow through the season. There are districts in England, where an acre of land furnishes an abundant supply for a cow or bullock, and occasional farms in our own country do quite as well. Our window overlooks a small pasture of an acre and-a-half, that will carry two cows through the Summer. Three years ago it produced nothing but sour wild grasses, fit only for bedding. Now it has a luxuriant growth of herds-grass, white clover, and blue top. The only ameliorating influences that have been brought to bear upon it are, drainage, a top dressing of ditch mud and soil, and a few pounds of grass seed. It has not been plowed or manured. The rent of the present season, twenty-four dollars, will more than pay for the whole expense of reclaiming. There are millions of acres of pasture land, that only need to be relieved of their water, and to be sowed with grass seed, to double the amount of their grass, and to greatly improve its quality. Why should a farmer be content to keep ten cows, when he has land enough to feed twenty? Close cropped pastures where no grass is suffered to go to seed, can not be expected to perpetuate themselves for ever.

And the meadow land stands quite as much in need of improvement. The average yield for the country is less than a ton of hay to the acre. Indeed it may be doubted if there is a single state that will surpass this average. Yet there are farms that will average two tuns to the acre, and many well treated fields that produce three and four. It is certainly much easier to fill the barn with hay, from a small area of heavy grass, than from a hundred acres yielding half as many tons. It is painful to think of the unpaid toil expended upon these half tilled acres. We naturally think of it now, as we are sweating under the meridian sun, when it is bad enough to work even at two dollars a day or more, in hard coin. There are several remedies suggested for these lean meadows. Many of them need draining, and there is no radical cure of their infirmities, short of this. With this alone many of them would yield twice the quantity of grass, and would be more than doubled in value, for the hay would be of much better quality, and the land would be in condition to make the best use of every load of manure put upon it, for a generation to come. Others need breaking up and manuring. They have been in grass for ten years or longer, and the crop has been uniformly removed, and nothing returned. Is it strange, that they have grown tired of the regimen? Others will be helped by top-dressing and sowing with grass seeds. These seeds catch readily with surface dressings of compost or stable manure, and many fields can be made to yield double with this treatment alone.

The yield of hay at the last census, was a little short of fourteen millions of tons, worth at least one hundred and forty millions of dollars. Could the productiveness of our meadows be doubled, it would make a very handsome addition to the national wealth.

Calendar of Operations for July 1859.

[We note down sundry kinds of work to be done during the month, not so much to afford instruction to practical men, as to call to mind the various operations to be attended to. A glance over a table like this will often suggest some piece of work that might otherwise be forgotten or neglected. Our remarks are more especially adapted to the latitudes of 38° to 45°; but will be equally applicable to points further North and South by making due allowance for each degree of latitude, that is, earlier for the South, later for the North.

EXPLANATIONS.—*f* indicates the *first*; *m* the *middle*; and *l* the *last* of the month.—Doubling the letters thus: *ff*, or *mm*, or *ll*, gives particular emphasis to the period indicated.—Two letters placed together, as *fm* or *ml*, signifies that the work may be done in either or in both periods indicated; thus, work marked *fm*. indicates that it is to be attended to from the *first* to the *middle* of the month.]

Farm.

July offers little leisure to the farmer who must be "making hay while the sun shines." The hay and grain fields remind him that he must push on his harvest, while the buckwheat and turnip patches are still to be manured, plowed and sown. These will afford sufficient employment during fair weather, and the work-shop, barn, stables and manure cellars or sheds should be provided with work for rainy days. Care will be needful during this very hot weather not to overheat the system, and moderation and temperance are requisite in eating and drinking. Farmers, and particularly farmers' boys are accustomed to bathe frequently at this season. They should not go from the hay fields and plunge into a cool stream while enervated by hard work, and dripping with perspiration. Morning is the best time for bathing.

Many of the directions of last month are applicable to the first weeks of July. Read them again and attend to any of the operations not yet completed.

Bark of Hemlock and Oak will "run" during most of July, and may be peeled for tanners, at any leisure time during dull weather. Pile up the former peelings.

Buckwheat—Sow, ff, to m, just before or after a rain, if possible. Read article elsewhere.

Buildings, Yards, &c.—Keep everything about them clean and neat. Leave nothing to ferment and breed distempers. Chloride of lime, or copperas dissolved in water will fix the noxious gases escaping from the privy and sink-drain, or spout.

Butter and Cheese making are the heavy labors of indoor work. Many useful hints will be found in the series of articles now being published in the *Agriculturist*.

Cabbages—The late crop may still be planted, ff, among early potatoes, peas or other crops ready to harvest.

Corn for soiling may be drilled in or sown broadcast, ff. It will form a good succession with the earlier plantings. Hoeing and weeding may still be needful among the early plantings.

Fences should not be overlooked in the press of work.

Haying is the important work of July, but with a good mowing machine on smooth ground, a boy and team of horses can perform the heaviest labor, and do it at the proper time, neither too early nor too late, or when wet with dews and rains. Use the hay caps when necessary, and do not burn the hay up with a hot sun.

Hoeing will be a secondary operation this month, but the cultivator or horse-hoe should be run through the corn in the morning while the dew is on the grass and grain.

Manures—Attend to as last month.

Millet or "Hungarian Grass" may still be sown, ff, for a successive soiling crop.

Oats will require cutting, ll. They should not be allowed to become over ripe.

Pastures—See that the grass is sufficient for the grazing stock. A scant feed now will soon be seen in a diminished supply of milk, and slow growth of young stock.

Poultry require the same treatment as last month.

Potatoes—Early crops will be ready for harvesting and marketing during the month, and the ground may now be appropriated to late cabbages or turnips.

Rye—That sown last Fall is now ready to cut, ff. Secure it from storms as soon as it will answer.

Seed Wheat, rye, and other grain should be allowed to fully ripen before cutting. If mixed, or containing foul stuff, go over and pick out the foreign substances as soon as cut by the grain-cradle or machine.

Sheep are apt to be worried, and killed even, by dogs, at this season. A few small bells placed upon the necks of several of the flock will usually help protect them. Give salt each week.

Sugar Cane—Sow, ff, in drills, or broadcast for cattle and hog feed, both green and cured. Keep the early crops for manufacturing well cultivated.

Timber, for fencing or building of any kind is much more durable when cut in July and August, than in the Winter season. This is particularly the case with the hard wood kinds abounding in sap. This sap has now parted with its watery portions and is forming an outer layer of new wood.

Tools—Keep the scythes and mowing machine knives sharp, and the bearings well oiled. In short have all tools, machines, and farm gear in prime order. Repairs can be made during rainy days.

Turnips—Sow for full crop, f, mm, and even, l. Newly plowed rich soil is best. See article elsewhere.

Wheat—Do not delay the cutting a single day after it is sufficiently ripe. A storm may beat it down and materially injure it. Cut, dry, bind and "stook" it up as fast as possible. See article on the proper time for cutting.

Young Stock—Give them especial care at this season. A calf or colt whose growth is checked now, seldom does as well afterwards.

Orchard and Nursery.

Fruit growers are now rejoicing over some of the earlier fruits with a fair prospect of a good yield of later kinds. This is the more welcome from having had a short supply for several years past. The most important work in the orchard for this month is pruning.

Budding also comes in for a large share of the tree grower's time. Plum, cherry, and pear stocks will be ready for the operation by the middle of July—even earlier in some localities. See full chapter with illustrations on page 161, Vol. XVI.

Cherries—The late varieties are now ready for picking and marketing, drying or putting up in cans and bottles. A good supply of the bottled fruit will not come amiss next Winter. Save pits of cherries for planting and put them in boxes of earth before they become dry.

Grafts—Loosen any bandages which cut into the stock; replace wax or cement that has fallen off, and rub superfluous shoots from the stock.

Hoe grounds often both to keep down weeds and promote moisture. Let neither grass nor weeds rob the newly planted trees of food or drink.

Inarching, or grafting by approach may now be done on both deciduous and evergreen trees.

Insects—Destroy the late broods of caterpillars; hang up open bottles of sweetened water, and kindle bonfires for the apple worm miller; pick up wormy plums and apples, and feed out, or cook to destroy the insects; dust pear and cherry trees with lime, or syringe with whale-oil soap and water to destroy slugs; and make use of the borer preventives treated of on a subsequent page.

Layer nursery stools kept for propagation. The growth of the present season may now be laid down. Grape vines and flowering shrubs can also be layered now.

Manure, ff, trees bearing heavy crops. Procure a good supply of muck during dry weather, for use another season. Lime and ashes are also very valuable for trees.

Pinching, or shortening in of the Summer growth of small trees can now be done to advantage. See article.

Plow or run the horse-hoe or cultivator between the nursery rows as often as the weeds appear.

Pruning—This is the appropriate season for pruning, which is discussed at length on a subsequent page.

Thin Fruit, especially on young trees. Those set out this season should not be allowed to ripen fruit. Many trees are seriously injured by permitting them to ripen an over crop. By removing a portion of the fruit on older trees, the remainder will be much finer.

Weeds are easiest kept down by not permitting them to get a start.

Kitchen and Fruit Garden.

One of the first things requiring attention now is to see that all vacant spots are planted with late vegetables. Some of the early crops are ready for use or for market, and after clearing the ground, giving a coat of manure and a deep spading or plowing, it is all ready for a second planting. Hoeing and weeding will come in for a large share of the work of July, and as a general thing those vegetables will do best which receive the most *frequent* hoeings.

Asparagus should be cut no longer. Give it an opportunity to develop itself and acquire strength for another year, but allow no weeds to grow in the bed.

Beans—A few of the quick growing kinds, as early Valentine, Refugee and China may still be planted, ff.

Beets for Winter use do well if sown, ff. Stir the ground among former plantings. Some of the early beds will now yield a supply for the table. Thin out to 8 or 10 inches in the row. The plants pulled up make good greens, cooking tops and roots.

Blackberries—See that canes and heavily loaded *branches* are tied up so as not to bend over or split down under the weight of fruit. Keep hoed or mulched.

Cabbages and Cauliflowers—Set out the remaining plants; ff, m. Water the beds before taking them up, and the plants after setting—always retaining as much earth about the roots as possible when transplanting them. Set in the afternoon unless a cloudy or damp day be chosen. The crop of early cabbages is now ready for market, leaving the ground for late plants.

Celery—Plant out the late crop in recently prepared trenches, ff, watering and shading with a board shelving over them, unless set in cloudy weather. Hoe often.

Corn—Plant sweet varieties, ff, for final crop, which with that planted the middle of June will give a good and prolonged succession for table use, and for drying or putting up in cans or bottles.

Cucumbers and Gherkins may still be planted, ff, m, for pickles. Keep former plantings well hoed.

Egg Plants—A few may still be put out, ff. If on good soil and well tended they will yield a fair crop.

Endive—Set out, ff, for late use, and sow seed at the same time for Winter crop.

Grapes.—Continue to nip in the bearing shoots, leaving but four or five leaves beyond the bunches. Rub off unnecessary shoots, but allow the renewal growth to extend itself for future bearing.

Herbs are mostly in flower, ff, and should be cut for drying or distilling. Gather them in the early stages of bloom, dry in the shade and rub off the flowers, putting in cans or bottles, so as to keep from the air. Rose leaves may be preserved in like manner, or immediately distilled.

Hoe often during this month, using labor saving and soil loosening implements wherever practicable. The ground should never be allowed to bake, and thus shut out air and turn off water. Hoeing invites moisture from the air, to say nothing of destroying weeds.

Insects still require looking after. Make friends of birds and toads. The spotted squash bug is especially troublesome at this season unless kept in check by hand picking. An application of salt to land about to be set out to late cabbages will be useful in keeping off insects and worms.

Lettuce—Plant for a constant supply, f, m, l. Sow the Silesian lettuce for late use.

Melons—Plant, ff, for mangoes. Hoe those planted early

Mushrooms—Begin to collect spawn materials, m, ll, for Autumn beds.

Onions—Keep well hoed. Sow, ll, for "pips" to put out next season.

Peas—Those sown, ff, will be little troubled with weevil, and it is not too late to sow for good succession of green peas.

Potatoes—Early crops will soon be ready to harvest See that the land is occupied for the rest of the season by turnips. Unless gathered for early use or marketing better leave potatoes in the ground.

Preserving Fruits and Vegetables—Now, while the table is abundantly provided with these, remember the dearth of the winter season, and put up a good supply of fruits. See page 214.

Radishes—Scatter a few seed among other crops, ff, m, for late use.

Raspberries are now in the hight of bearing and require daily picking.

Rhubarb is still in good eating condition when pulled from near the centre of the plant. Dry or put in cans or jars a quantity for Winter use.

Seeds—Gather Turnip, Cabbage and other seed now ripening. Dry with care, and label for another year. Turnip seed of this season's growth will answer for sowing now.

Spinach—Sow, ff, m, for late use. Save some of the early sowings for seed.

Strawberries are now pushing out their runners in all directions. We prefer clipping, and confining them to hill culture, except where new plants are wanted. Keep well hoed, unless a mulch has been used.

Thinning both fruit and vegetables may still be necessary. Give both plenty of room.

Tomatoes—Set late plants, ff, for a Fall supply. Support the early vines by stakes, trellises or bushes.

Transplant vegetables of all kinds with care at this season. The hot dry weather renders them less liable to live. Water the seed bed thoroughly before taking up plants, and set out in the evening or during dull weather, shading from the sun a day or two.

Turnips—Sow the main crop for Winter use, f, m, or even l, in southern latitudes. Seed may be scattered among corn and other crops which will come off early There are usually many vacant spots about a garden where a few turnips may be grown with very little expense.

Weeds—Compost or give them to the hogs if they have been permitted to grow at all.

Winter Cherries—Though rather late, they may still be planted out with a prospect of ripening.

Flower Garden and Lawn.

These grounds, if heretofore kept in good order, should now be very attractive, affording an occular demonstration of taste, order and neatness on the part of the household, and inviting frequent visits of both family and friends. A well arranged and well kept flower garden is a place all like to frequent, and enjoy a little relaxation of care in breathing the sweet odors of flowers, admiring their beauty, and listening to the songs of the birds among the shrubs and trees. A rustic arbor or seat beneath some noble tree upon the lawn, forms a cool and attractive resting place in the heat of the day and during twi

light, for cheerful conversation or pleasant reflection.

Annual, quick growing flowers may be sown, ff, on ground occupied by bulbs or early blooming plants.

Bulbs—Lift, ff, m, those which are to be divided and reset, filling their places with annuals.

Carnations, Pinks, Picotees and Pansies—Continue to layer and put in cuttings, ff, m. Water in dry weather, and keep flower stalks neatly tied up.

Dahlias—It is not too late to set out plants started last month in pots or otherwise. Prune side branches and firmly stake tall plants.

Flower stalks are unsightly after completing their bloom. Cut them away and plant annuals to occupy the space.

Gravel Walks should be kept scrupulously clean from grass or weeds, and be often raked to prevent packing. Renew any thin spots.

Hedges—Finish the first pruning or clipping, ff. Plash, or weave in to fill up weak places.

Hoe grounds often. Even if there are no weeds, the soil should be frequently stirred with a hoe or rake, to prevent crusting.

Insects—Look after the rose slug, dahlia borer, leaf hopper, etc. They still require some care.

Lawns and Grass Edgings look best when covered with a growth of only a few inches in hight. Mow or shear often, trimming smoothly.

Neatness and order should be prominent features of the flower borders. Allow no weeds to grow; cut away decaying stalks, leaves and branches; tie tall growing plants neatly and securely, put the walks in good order, and have everything about the grounds as attractive as possible. Remember these gardens are the appropriate "Pleasure Grounds" of the farm-house or cottage.

Potted Plants—Keep them watered, and the soil well stirred and free from moss. Turn the pots occasionally, to disengage any roots which have penetrated into the soil through the hole at the bottom.

Prune trees and shrubs as recommended on page 211. Many plants now growing vigorously may be improved in shape by cutting back and pinching in.

Rhododendrons now make a fine show of bloom. Water freely and hoe often, or mulch about them.

Roses are still in full flower and fragrance. This is the proper season to bud and layer in order to change the variety and increase the stock. New growth, layered now, will root sufficiently to be removed another Spring. Keep pillar and climbing varieties tied to stakes, or trellis. Use the oil soap solution freely to destroy slugs and leaf hoppers. Even the rose bug evidently dislikes the odor.

Seeds—Collect any of the early varieties now ripening.

Stake or otherwise confine all tall growing plants liable to be broken down by high winds.

Transplant the remainder of the biennials and perennials sown last month.

Verbenas—Increase stock of Fall blooming plants by layering.

Water any plants needing it during dry weather.

Weeds—Keep down by frequent hoeings.

Green and Hot Houses.

These are comparatively empty now, save in extensive propagating houses, or where there are large collections of tropical plants which are more conveniently managed under cover. Of course the houses are now open most of the time, excepting during cold or heavy rains. An abundant supply of freely circulating air is indispensable, and sprinklings or syringings should be frequently given in addition to copious waterings. If transparent glass is used in the houses, shade them during sunshine.

Budding may now be performed upon many of the woody plants.

Callas—Repot towards the latter part of the month, watering less freely.

Camellias—Bud, ff, m, repotting at the same time those requiring it. Shape to a good head.

Cinerarias—Divide the roots of old plants to increase the stock.

Cissus—Arrange in convenient positions for training near the glass. They will bear a high degree of heat.

Cuttings of a large number of plants may be made, ff, m. Insert them at once in pots of prepared mold.

Earth for Potting—Provide a good supply and have it well mixed against a time of need.

Fuchsias—Repot, f, m, where large plants are wanted.

German Stocks—Plant for Winter bloom, f, m.

Grapes—The early houses have ripened their crop and the vines require plenty of air to complete their growth. Later vines may still need pruning, pinching in, and thinning of the bunches. Guard against insects and mildew.

Insects of all kinds need especial looking after now. The whale-oil soap solution will prove sufficient in most cases, although it may sometimes be necessary to resort to tobacco fumes.

Layer and inarch many of the woody plants to increase the stock, ff, m.

Oranges and Lemons—Complete budding, ff, m.

Pines are now ripening, and require a moderate amount of water, with an abundance of air. Plant well-ripened and partially dried crowns for a new supply. Side suckers may be set out for the same purpose.

Potting—Many of the seedlings are now large enough to pot. It is usually better to put them in pots of sufficient size for growing the remainder of the season.

Prune Plants, ff, m, to bring them to a good form. In some of the plants the old wood requires cutting away to renew the growth.

Seeds—Gather any ripening, and save with care, or plant at once.

Verbenas, petunias, geraniums, &c.—Get up a Winter stock, by cuttings and layers, f, m.

Water—Give copious supplies during the warm, dry weather of this month, sometimes both morning and evening. Wash freely with a syringe.

Apiary in July.

BY M. QUINBY.

Those bee keepers who are so far behind the times as to destroy their bees with brimstone, to get the honey, and who live in sections of country where but little buckwheat is raised, will do best to take up their hives the last of July, as the bees store but little afterward in such places. The best pieces of comb may be selected for the table; they must be kept in a cool place or the moth worm will hatch out and spoil them. They should also be kept dry, otherwise the honey will absorb moisture and make it thin, and sometimes sour.....Honey that is strained out in warm weather, should be kept dry, and cool if possible. After standing awhile, a thin portion will rise to the top; remove this carefully, and the remainder will be good for cold weather.....To keep white honey pure, all surplus boxes containing it should be removed before the dark honey from buckwheat is mixed with it. Boxes expressly for buckwheat honey, may be put on afterward if needed; examine them, and if found to be so, drive out the bees to begin anew, any time before the flowers fail. Three weeks after the first swarm, is the proper time, but it is better to do it late than not at all.....Any stock that has swarmed out freely, leaving too few bees to cover the combs properly, should be closely watched for the first appearance of the moth worm, whose presence is indicated by numerous small black shining specks like powder, on the floor of the hive. When nothing more can be done to save the stores, or the dry combs, for the bees, it is best to secure the contents of the hive at once, before the moth destroys all.... Set about the hives at night, shallow dishes filled with sweetened water; moths by hundreds will often thus get drowned; they may be fed to the chickens.....It is unnecessary to watch for a second swarm from a hive, later than eighteen days after the first swarm.....The season must be very backward, when *any* swarms issue later than the middle of July.

How Cotton is grown and Prepared for Market*.....I.

The familiar proverb, "Cotton is king" shows the importance of this crop in our agriculture, and in our financial exchanges. Though inferior to some other crops in pecuniary value, it is more largely exported, and its influence is more immediately felt upon the finances of the country. Meats, breadstuffs, and forage crops are largely consumed in the immediate vicinity where they are produced, while cotton is almost exclusively sent abroad for a market. So few are the cotton manufactories in the southern States, that the amount consumed by them would hardly be missed from the aggregate. About three-fourths of the crop are exported to Europe, of which England is much the largest purchaser, and the balance is mainly manufactured in the northern States. This feature of the cotton crop has a marked influence upon the whole region producing it. As it is all sent abroad, there are no home markets fostered by this kind of husbandry, and the region is more exclusively agricultural than any other part of the country.

The cotton region, though much larger than the sugar district, is still a narrow belt of country not over three hundred miles across, and lying on both sides of the thirty-second degree of latitude. In passing down the Mississippi, it is reputed to begin at Columbia, in Arkansas, and to extend about down to the mouth of the Red River. In this region little else is cultivated, except partial supplies of corn, sweet potatoes, and bacon, for the forces upon the plantation. To the south of this region, sugar is the main crop, though considerable quantities of cotton and other articles are raised. Cotton is also raised largely north of this belt, but it takes its place with other crops, as corn, tobacco, wheat, bacon, and hemp. In this narrow belt the climate seems to be exactly adapted to the wants of the plant, and cottons of the finest quality are raised.

CAPITAL, BUILDINGS, AND MACHINERY.

Much less capital is needed to work a cotton, than a sugar plantation. The best of forest lands for this plant, in the State of Mississippi, can be bought for from ten to thirty dollars an acre and in the newer States for a much less price. Lands much worn are frequently sold for five to ten dollars an acre. The dwelling upon the cotton plantation is a much less expensive affair than the farm house of the North. It is often made of logs, rudely finished, and almost invariably without any cellar. The chimneys are often made of mud and sticks, and as a rule, upon the outside of the building. In the case of very wealthy proprietors, the mansion is of course more expensively built and furnished. The dwellings of the slaves are still more rude, generally consisting of one small room, and without any other provision for lighting the apartment, than the door and a window in the rear, closed by wooden shutters.

The gin-house and mill for grinding corn are generally under one roof, and the machinery in both cases is moved by mule or horse power. As the timber is furnished upon the spot, the principal part of the expense is for the machinery, which is generally limited to a few hundred dollars, and rarely exceeds a few thousands. The barns and hovels for the mules and stock, are generally of home manufacture, and do not require a large outlay.

The largest part of the capital is almost invariably in slaves, and as these are usually born on the plantation, inherited, or gained by marriage, the planter is prepared to grow cotton in a new region, without any very large extra investments. As soon as the buildings are put up, the process of girdling and clearing commences.

SELECTION AND OPENING OF PLANTATIONS.

The favorite sites for building are bluffs, or elevated spots, near bottom lands. The planter who has opportunity for selection, is guided somewhat by the character of the timber upon the land. The post-oak and water-oak indicate a soil rather too cold and heavy for his purpose. The pines indicate a soil too light to yield many crops without manure. The beach, white-oak, whitewood, or poplar, the magnolia, and the white and black gums are the surer signs of good cotton lands. The reed cane and the cypress also grow upon rich lands, but these generally want more or less drainage to fit them for cultivation.

The moving almost always takes place in Winter, and the first work after building is the girdling of the primitive forest trees. The small trees and underbrush are cut down, and either burned upon the spot, or saved for firewood. A few of the large trees, white-oaks and poplars, splitting freely, are also cut and rived for fencing. The trees frequently put out after girdling, but the hot suns of July and August generally finish them. The ground is plowed, and planted either with

* This series of articles, like others on Southern Crops, is from the pen of one of the Editors of the *American Agriculturist*, who commenced an extended Southern tour of observation at the beginning of the present year.—PUB. ED.

corn or cotton the first season, and about a half crop only is expected on account of the shade. The second Winter a few more of the dead trees are cut down for rail timber, and others are blown over by the winds. Many of the limbs also rot and fall, and the crop for two or three years is a good deal injured from this source. Decay goes on much more rapidly than in our northern climate, and after the fourth season, few shrubs or trees are left to interfere with the cultivation. It is thought to be much more economical to allow decay and the winds to prostrate the trees, than to do it with the ax, though the falling trees and limbs often do extensive injury to the growing plants. In the rich bottom lands cotton is frequently planted six or eight years in succession, and where rotation is attempted, corn alternates with cotton.

PREPARATION OF THE SOIL AND PLANTING.

After the plantation has been cleared of its timber, the preparation for a new crop begins very soon after the old is gathered. There is very little frost or cold weather in ordinary seasons to interfere with out-door labor. The cotton is almost invariably planted upon ridges about five feet apart. They begin to prepare these ridges in February and March, by turning two furrows together. If it is an old cotton stubble, the ridge is marked in the middle of the last year's rows, thus giving the crop a little change of soil. In uneven ground care is taken to run the furrows as nearly level as possible, around the sides of hills, to prevent washing. The soil of the best upland plantations is a loose friable clay, easily removed by the action of water. Grass is not at all cultivated, and there is nothing to hold the surface of the soil, when it lies fallow, but brown sedge, nimble will, and weeds. With the best precautions, a good deal of it is washed off, and all the rivers are as turbid as a mud puddle, for the larger part of the year.

After the ridge is prepared by plowing in April, a light harrow is run over the top, to break all lumps, and to level it. Then a drilling tool or marker is drawn by a mule upon the top of the ridge, making a narrow furrow, two or three inches deep. A hand immediately follows, scattering the seed as uniformly as possible in the drill, putting in at least ten times the quantity that will be suffered to grow. Another follows the sower, covering the seed. This is sometimes done with a hoe, sometimes with the foot, and again with a sort of scraper drawn by a mule. Cotton seed-planters are beginning to be introduced on the better class of plantations, and they make a great saving of seed, and time. They open the drill, drop the seed, and cover it as rapidly as a mule can walk, thus saving the labor of two hands, and insuring a much more even distribution of the seed. No crop is more benefitted by manure than cotton, and yet it is not until quite recently, that cotton seed, one of the best kinds of manure for the plant, has been saved. This is now pretty generally applied in the upland districts.

(To be continued.)

A Word for the Crows.

A. A. Mitchell, Westchester Co., N. Y., writes that from long observation he is convinced that crows are, on the whole, beneficial to the farmer. He says, although they may be troublesome by pulling a few hills of corn in the Spring, the remainder of the season they are busy destroying injurious grubs and insects more than sufficient to pay for all such damage. It may be so, though we confess the sight of long rows of corn-hills that have "come up missing" from their depredations, has often moved us to war upon them. Latterly we have simply put up strings enough around the field to suggest the idea of traps and snares, and the wary crows keep shy. We thus save our corn, and get all the good the crows will do by a lease of life.

The N. Y. City Meat Markets—How Supplied, etc.

A very natural inquiry from the farmer visiting New-York, for the first time, and seeing the multitude of people thronging the streets, including residents and strangers, would be: whence do all these people derive their food, and especially their meats? This is an interesting question. If we take into account visitors and business men from other parts of this country, and from other countries, there must be nearly an average of one-and-a-half millions of people who must be constantly fed from our city markets. Some 25,000 live animals are *weekly* brought here to be slaughtered. One of the editors of the *Agriculturist* gives constant attention to our live stock markets, and the general result is stated in our monthly review. We propose to give some *particulars* which will be both interesting and useful.

BEEVES.

For the year 1858, the receipts of *live* bullocks at the New-York Markets, numbered 191,170 head. This includes about 300 head per week sold at Bergen Hill, just over the Hudson River, in New-Jersey. The greater proportion, say six-sevenths, of these cattle are sold at the Forty-fourth-street yards, between Fourth and Fifth Avenues. There is kept at these yards a register of the origin of cattle, etc. From the weekly notes taken by our reporter from these books, and from the owners of the cattle, we have the following origin of those at 44th-st.

1858	
From the State of Illinois	30,900 bullocks.
From the State of Ohio	16,167 "
From the State of New-York	12,706 "
From the State of Indiana	4,458 "
From the State of Kentucky	2,425 "
From the State of Iowa	1,471 "
From the State of Pennsylvania	1,087 "
From the State of Virginia	809 "
From the State of Michigan	704 "
From the State of Texas	214 "
From the State of New-Jersey	187 "
From the State of Connecticut	161 "

By the above, it will be seen that Illinois supplied us with by far the greatest number of cattle; Ohio comes next, followed by New-York. It may be remarked, however, that a portion of the cattle hailing from Illinois, were originally from Texas, Missouri, and the Cherokee Nation, but fed for a time in Illinois. So also many of those from New-York State were grazed in Illinois, or Ohio, and bought up by feeders from this State to give a finishing touch, or have them in readiness to shove into market at any time when there was a prospect of a short supply, and consequently higher prices.

The business at the West is mainly carried on by extensive graziers owning large tracts of prairie or other pasture. A single Illinois firm sent to this market over 10,000 head of cattle during the last year. Some of these graziers, are also drovers, bringing in their own cattle and occasionally selling them. Others raise the animals and sell to cattle dealers, or drovers, to bring in and sell to the butchers, or more frequently consign them to commission men who make a business of selling for $2@$2 50 per head, and guaranteeing the sales. This is preferable, as the salesmen are acquainted with all the city butchers, and know whom it is safe to trust, as comparatively few of those buying cattle to kill, pay down for them. The seemingly high commission is in anticipation of some bad debts. The brokers usually pay the drovers at the close of the sales so that they need not be detained in the city. Not unfrequently these brokers, in anticipation of a rise in the market, will buy the cattle in bulk and retail them out on their own account. Quite a number of them have large farms within a few hours travel of the city, and if they have any cattle left upon their hands they take them home and await a future market.

The cattle now come in mainly by railroad. Formerly they were driven in by short stages, taking six to eight weeks to come from the West It now takes but ten days to two weeks to bring cattle from central Illinois. A few lots recently came through from Chicago, Ill., in five days. The charges vary at different seasons, the railroads often running in opposition to each other. A few weeks ago some dealers contracted to have their cattle brought from Chicago, Illinois, to this city for $3 per head. The freight is now 70c. per 100 lbs. from Chicago, to New-York, by the leading routes, or about $10 per head. This includes tickets for one man, or more than one if the drove is large, to take care of the cattle, but all feeding expenses are extra. As the leading routes combine upon a high tariff, the cattle men seek out more circuitous routes, with lower charges.

Western cattle dealers usually buy their cattle at a stated price per lb. *live weight*, but as weighing scales are not always at hand they often agree upon the weight by the eye. Those long accustomed to judge in this way will estimate very nearly the correct weight. Prices range at different seasons, and upon different qualities, at 2½c. @3½c. and 4c. per lb. at the West. They are usually sold here by the head, but with reference to their net weight—that is the four quarters of beef. Butchers usually estimate whether they are paying 10c. or 12c. per lb. for these quarters. The animals are sometimes weighed at the yards and a stipulated shrinkage allowed, say 44 lbs., or if quite fat only 40 lbs. per 100 lbs. live weight.

(To be continued.)

Fill Up the Vacant Spots.

The combined effects of late frosts, insects, poor seed, etc., have left, here and there, in the farm or garden, more or less of vacant spots where there will be from a few feet to several square rods of ground in which no valuable plant is now growing. The thrifty man will not leave these through the season, to disfigure his plantation, to foster weeds, and especially to be so much ground ready prepared but wasted. Transplanting from thick to thin spots may be easily and profitably done, as noted elsewhere. In many places pumpkins may be planted among corn and potatoes, even during the early part of July. Turnips will be in season if planted at any time during the month. On very many farms hundreds of bushels of turnips may be raised simply by sowing the seed in thin places where corn, potatoes, and the various other crops have been destroyed.

TURNIPS AMONG CORN.—Apropos to the above, we give the following, just at hand, from a "Rhode Island Farmer." He writes: "Perhaps the readers of the *Agriculturist* may not generally know how easy they can raise a crop of the purple top strap leaf turnip, or the cow-horn variety, by sowing them among their corn after the last hoeing, say one pound of seed to the acre broadcast, costing perhaps seventy-five cents and the trouble of sowing. They will not make much growth before harvesting the corn, but after that

they will push ahead rapidly. They are often raised in this way in this way in this State. If not needed for feed they will enrich the ground to the amount of at least four times the cost. They may be fed directly off the field, before frost, by turning the cattle and sheep in and letting them help themselves, or they may be stored for Winter use, when they will be found to be a valuable addition to the store of Winter food for stock. Let the farmers try it, and give us their experience in this matter.

Curious Freaks of the Frost.

The untimely frosts of June, 1859, will long be remembered by some farmers and gardeners. The injury done has, indeed, been found to be less than was feared at the time; though it is of very considerable local importance.

Our purpose here is only to speak of some of the *curiosities* of the frost-work, as we saw or heard of them. In the garden now before us, (Oneida Co., N. Y., lat. 43° N) one row of beans was badly nipped, while another, only a few feet away, was not affected at all. In another row every other plant, or every third or sixth or eighth plant, was scorched, while the others escaped. Out of fifteen hills of Lima beans, only two or three were cut off. Then again, one plant in a hill was nipped, and others were not touched. On tomatoes, the Frost-king skipped about in the same wanton manner. Here, he cut off the young flowers of a plant; there, he blackened the leaves, and in several instances he merely marked the outer edges of the leaves with a gold border. The only way we could explain these various effects, was by ascribing them to some slight difference in the nature of the soil under and around each plant.

One or two tomato plants were covered with pieces of old roofing tin, bent over the plants so as nearly to touch them. These tomatoes were injured more than those which had no covering; and plainly, because the tin was too rapid a conductor of heat, and bore it off from the plants underneath. Nearly the same thing occurred with some tender flowering plants covered with newspapers; the papers were stiffened by the frost, and the flowers were injured more than some which were unprotected. In a neighbor's garden, a row of tomatoes which stood near a body of tall mowing grass, was badly injured, while another in the open ground was untouched. In the same garden, beans, potatoes, and sweet corn, were nearly all cut down, while ours, only two or three rods distant, on the same level, and with the same natural quality of soil, were hardly touched. His garden was a new one, and the ground had not been as thoroughly manured and worked as his neighbors. Let superficial gardeners make a note of this.

In Western New-York, many garden and field crops suffered severely. Grapes trained on the south sides of houses, or walls, or fences, were only slightly injured; others were quite generally destroyed. Fruit trees having heavy foliage, suffered less than those sparsely covered. Early strawberries, being about ripe, were slightly injured; late sorts being just in bloom, were badly cut up. Tomatoes, cucumbers, melons and beans except those covered up, were slaughtered. One amateur in Buffalo, fearful of the frost, covered his dahlias with earthen pots, but forgot to cork up the holes in the bottoms. Jack Frost went in through the holes. Another gentleman, rising early, and seeing what the frost had done, hastened to sprinkle his flowers and tender vegetables with cold water, but forgot to sprinkle his grapes, of which he had a large and choice variety. His fruit was nearly all killed. Another gentleman had a bed of Japan lilies, half of which were destroyed, the others went through unscathed. In another garden, a pail of water which stood near four tomato plants was frozen over, and two of the plants killed, while the other two were unhurt!

We might enumerate a multitude of similar facts, but our want of space forbids. The laws of frost are worthy of careful study. It is not easy to tell always how much is owing to peculiarities of soil, position, currents of wind, moisture, the presence of neighboring objects retaining or radiating heat, and the like natural causes; and how much is to be ascribed to the simple dispensation of Providence. Let us observe.

For the American Agriculturist.

The Dominique Fowl.

This well-known and much neglected common fowl, is supposed to be an old and distinct variety, though usually looked upon as a mere farm-yard fowl; that is the accidental result of promiscuous crossing; but there are several forms among the barn-yard fowls, so called, that are seen to be repeated generation after generation, the counterparts of which are met with scattered here and there all over the country. The Dominiques are distinguished by their markings and their color, which is generally considered an indication of hardihood and fecundity. By some they are called "Hawk-colored fowls," from their strong resemblance in color to the birds of that name. In England they are usually called "Cuckoo fowls," from the fancied resemblance of their plumage to the feathers of the Cuckoo's breast.

The prevailing and true color of the Dominique fowl is a lightish ground, barred crosswise, and softly shaded with a dark slaty-blue, as indicated in the portrait of the cock as figured above. The comb varies, some being single, while others are double—most, however, are single. Feet and legs light flesh-color, and yellow; bill the same as that of the legs.

The merits of this breed recommend them to persons residing in the country, as well worthy of promotion in the poultry-yard. Whether as makers of eggs, or of meat, as sitters, or as nurses, they are valuable. We seldom see bad fowls of this variety, and take them all-in-all, the writer does not hesitate in pronouncing them one of the best and most profitable, being hardy, good layers of more than medium sized eggs, steady sitters, careful nurses, and what is very important, the chicks are hardy, feather early, and are easy to rear. It is a perfect vexation to try to raise chicks of some of the more tender varieties, for they are continually drooping and dying. The Dominiques afford excellent quality of eggs, and flesh of a juicy, high flavored character—in the latter quality little inferior to the Dorking.

There is a vast difference in fowls, as is known by every one who has paid any attention to the subject; while some are hardy and profitable, others are weakly and scarcely pay their way under the most favorable circumstances, and the best management possible. It is always a judicious plan for the farmer to keep a number of fowls of some kind upon his premises, as there is always enough waste or spare matter to feed them, and besides, they are serviceable in protecting the crops by destroying numerous insect depredators. The hen and a brood of chickens—the hen being confined in a coop, and the coop placed in the vicinity of the kitchen garden—not only keep the insects from destroying the tissues of the plants, but they annihilate the insects themselves, and convert them into a source of profit instead of a loss, by devouring them as food.

To render poultry profitable, it is essential that great care should be exercised, not only in the selection of valuable breeds, but in feeding and raising the young. If the raiser is remiss in these points, no profit will result from the enterprise, and as a general thing he will, to use an old adage —"have his labor for his pains." The more quickly the market penny can be turned, of course the greater the profit to the poulterer at the end of the year. C. N. Bement.

Springside, June 1859

Two more Out-Door White-Washes.

The recipe, published in the May *Agriculturist*, p. 136, we have tried on the Lima bean frames described last month, and so far it appears to work well. We used about two heaping tablespoonfuls of tallow to half a pailful of the mixed lime wash. The unslacked lime was put into a pail, water poured on, and the tallow dropped in. When the lime slaked and the mixture was hot, the tallow was thoroughly stirred in. But little of it afterwards rose to the top; it was stirred well, however, every few minutes while applying it.

In response to the inquiry for further information from those having had practical experience with other out-door washes, a subscriber in Plainfield, N. J., sends the following to the *Agriculturist* which he strongly recommends for both whiteness and durability: Mix Whiting (Spanish White) with buttermilk to a consistence a little thicker than common lime white-wash; to every pailful (2½ gallons?) of the mixture add two table-spoonfuls of salt and ½ pint of boiled Linseed Oil. The writer adds that a wash prepared in this manner will remain white six years. If the Whiting and milk will make a compound that will adhere, the oil will probably prevent its washing off. It strikes us that it would be necessary to keep the mixture warm and constantly stirred while using, or the oil would rise to the top.

Another—A Subscriber at New-Haven, Conn., sends the following, which he says has succeeded very well with him, it being so hard when dry as not to rub off even on a black broadcloth. Mix: ½ bushel of lime; ½ lb. of white vitriol (sulphate of zinc); 2 quarts of salt; and 5 lbs. of sugar—any refuse sugar will answer. We do not see why a compound like this should be so impervious to water, as not to wash off, which is the main difficulty with out-door white-wash, exposed, as they are, to rains and dews. We judge only from the chemical character of the ingredients, and not from actual trial, and therefore can not certainly say it will not answer the desired end.

Advertising Information—Gratis.

Latterly there have sprung up, in different parts of the country, a very benevolent class of advertisers, who offer great inducements to persons "out of employment," or anxious to get suddenly rich, or a sure cure is offered to the afflicted, etc. Generally, this class of advertisers need a stamp, or two, or three, or more, to remunerate them for their trouble, or to pay "return postage." Now, without at all calling in question the *character* of the offers made, we submit that it is quite a tax upon the people to be obliged to write to each of these advertisers before they can find out the nature of the employment offered, or the quality of medicine, or the kind of new implement, or plant, or seed, the use or sale of which will lead to certain wealth. Everybody must write a letter of inquiry, which costs a "stamp" to begin with, to say nothing of the time and labor of writing, and the "return postage stamp" often required.

We have hit upon a plan which will save a great deal of trouble, so far as *our* readers are concerned. We propose, as these attractive advertisements come to our notice, to have letters written to the advertisers, containing all needful enclosures of stamps or money, and making all proper inquiries. These letters will be signed by different names, and dated and mailed for us at some post-office in the country, and when the answers are received—if so be that any answers come, which is seldom the case if the first letter contains any money or stamps—the replies will be sent to our office. We shall then be able to inform a hundred thousand persons *all at once*, what the advertisers really offer. Will not this save a deal of writing and trouble on the part of the people? The advertisers cannot complain, surely. Will not this save *them* the trouble of replying to individual inquirers? But, while we undertake to do this much for the advertisers, we cannot do everything for them. It is against the rules to insert advertisements, in full, in our reading columns; and furthermore, we do not wish to rob other publishers of the profits of advertising, so we must omit the exact name and address. Where we leave a blank line, the curious reader may readily find a name to fit it by running over the columns of Daily or Weekly newspapers. We begin with specimens of the large number of advertisements already "investigated."

[No. 1.]

EMPLOYMENT.—$60 a Month, and all Expenses Paid.—A LOCAL AGENT is wanted in every County in the United States and Canada, to engage in a respectable and honorable business, by which the above profits may certainly be realized. For full particulars address ————, (inclosing one stamp to pre-pay postage), New-York City.

This advertisement struck us as very attractive—a "respectable and honorable business, and $60 a month, and all expenses paid." Why, very few men do as well as that. It is said that even some of the Presidents of this great country, with a salary of $25,000 a-year, have not saved $60 a month, *after* "all expenses were paid." Our hope was a little dampened by the clause "*may* certainly be realized;" but not discouraged in the anticipation of "bettering our condition," we got a friend to make all needful inquiries, by letter, sending the stamp, of course. In return, we received a large descriptive circular, which sets forth that an "old" doctor had retired from business, leaving in the hands of the advertiser a large edition of a book called "The ——," which he would "sell at any sacrifice." He will send them packed in wooden boxes, by express, to any part of the country. Orders must be accompanied by *cash*. They will be sold *very low* to agents. If anybody sells these fast enough he can clear "$60 a month and all expenses." Three closely printed columns in the large circular are taken up with descriptions of the wonderful book, which, according to the account given, teaches how to do everything possible and impossible, that has ever been thought of. We quote: "It teaches how to cure all diseases of the Human Race; to charm wild animals—your enemies, the perils of fire and water, your future wife or husband; how to court an American or French woman, a red-haired ditto., an Irish ditto., a Quakeress ditto.," in short, every species of the *genus homo* of the feminine gender. "It teaches how to cure all diseases of the human race; how to live two hundred years; how to cure stammering, drunkenness, squinting and *laziness!* how to cause rain, thunder and lightning; how to discover treasures under ground; how to make a fowl roast himself; how to kiss all sorts of women!" and so on to the end of the chapter. There is scarcely a human desire which cannot be gratified by following the directions of this wonderful book. We must have it, Mr. ——; send one of your agents this way, quick. We don't like to trust our money to the hazardous mails—nor to *you*.

[No. 2

$500 A YEAR.—Wanted, an Active, Honest man, in every county in the States, to travel and canvass for the ————, a beautifully illustrated monthly journal. To suitable, active men, a salary of $500 per year and a small commission will be paid. Address ————, Publisher, ———— N. Y.

Good again, but not so good as No. 1. Here is only $500 a year, and nothing said about "expenses." But the "small commission" may pay these, and the $500 a year "salary" is better than Pike's Peak. But how were our hopes blighted. Our letter, promptly posted, was too late! The advertiser had already got his full quota of "salaried agents" all secured, (what a lot of them—one in every county in the United States!) and he had no "salary" for us. But, being in one of his kind moods, he would give us a commission on subscribers, and we might make ever so much money. The copies of the paper sent us are of such a character as no decent man would admit into his family; but what of that? It's money we are after, and if people will pay, what's that to us? We must have an agency. But hold! every county is already supplied with a "salaried agent," with whom we shall come into competition. That won't do; let us try

[No. 3.]

This is from Rev. Wilson, (no matter where he lives). He offers a cure for consumption, for a postage stamp. This is cheap, and though we hope we are not consumptive, we know some who are, and what a world of good we may do, by having an infallible cure. So here go two stamps, one to pay the postage on the other. We received in reply a very benevolent-toned letter, not quite like a clergyman, however, closing with the hope that "he should hear from us soon and often." We are answering promptly as we can. But Mr. (Rev.) Wilson, we are more benevolent than even you are. We wont ask anybody to be at the trouble and expense of writing to you or to us, so we will give your recipe, with full directions, just such as you sent to us, and of course, genuine:

RECIPE FOR

CONSUMPTION, ASTHMA, BRONCHITIS, SCROFULA, ETC.

Extract Blodgetti	3 ounces	*Alantin (Pura)*	1 drachm
Hypophosphite of Lime	½ ounce	*Extract Cinchona*	3 drachms
Meconin (Pura)	½ scruple	*Loaf Sugar*	1 pound
Pure Port Wine	½ pint.	*Warm Water*	1 quart.

To prepare the above Recipe properly, all the powders and extracts should be thoroughly compounded and mixed well together, and placed in a vessel or bottle holding at least three pints; then pour in the bottle about a half a pint of hot water, and shake well, which will turn the whole a bright red color. Let it stand a few moments, then add the other pint and a half of hot water with the sugar dissolved in it; also add the wine, (or, if you have not wine, rum or Holland gin will do). Shake well, and when cold it is ready for use. Dose—one large table-spoonful four times a day.

Mr. (Rev.) Wilson tells us, ever so many times, in his long circular, that he has no "mercenary motives," don't want to make money, etc. Why, how will he pay for the large advertising expenses, if he has only the usual salary of a clergyman? But perhaps he has married a rich wife, and can afford it. He is even more generous. He says the above mixture is difficult to make, and will cost any druggist from $2.25 to $3 per bottle, at least, but he will sell it for $2. Noble-hearted man! We must have a bottle. [P. S.—Our druggist, a good one, says he could put up the prescription at less than $1, and *make money* at it, but he advises us not to touch it.] Disappointed again. Let us try

[No. 4]

EMPLOYMENT.—$50 a Month.—A resident AGENT is wanted in every Town and County in the United States, to engage in a respectable and easy business, by which the above profits may be certainly realized. Address Dr. ———— ————, No. ————, Jersey City, N. J.

Good again. "Respectable and *easy* business." "$500 a year *certainly* realized." That suits us; it is *easy* and *certain*, and no stamps wanted, only on our own letter. The only objection is that this "Dr." hails from Jersey City, where the "sands of one man's life" have been "running out" for several years. But we'll see... We got an answer, the gist of which is, that on remitting $9 we can have half a dozen of a wonderful balsam, quarter of a dozen wonderful pills, and quarter of a dozen of wonderful ointment, which will sell like hot cakes, for twice the cost, and we are to be "sole agents" in our vicinity. That's splendid, only our vicinity is not large enough. Our next door neighbor is to be sole agent in *his* vicinity. We'll think about the matter, ask our wife about it, and make further inquiries before sending our hard-earned $9 to Dr. ———— Humbug.

[No. 5.]

SECRET ART OF CATCHING Mink, Muskrats, Rabbits, Skunks, Weasels, Coons, Otter, Foxes, Woodchucks, Squirrels, etc., in great quantities, with sport and profit, sent for 25 cts. Address ————, Steuben Co., N. Y.

The above is an advertisement sent May 25th to the *Agriculturist* with $1 to pay for its insertion. A letter signed by a friend was immediately mailed to the party offering the advertisement, and the 25 cents duly enclosed for the secret art. Up to June 16th no reply has come, so we can not judge of the character of the secret, and therefore can not earn the dollar by inserting the advertisement. We hold it subject to the order of the person sending it. We would return it at once, but our 25 cents seem to have been *lost* in going to Steuben County, and we are afraid to trust the large sum of one dollar, unless Mr. ——, will send for it and agree to run all risk. We don't want this dollar, Mr.——, but we would like our 25 cents back, or that "secret art." We are in for "*sport*" in these warm days, especially when we can have it with "*profit*" as you say.

(*To be continued as needed.*)

Nursing Seeds into Life.

The following, which we find in a foreign exchange, is certainly a novel method of securing the germination of seeds; it will perhaps be a useful hint to those who may receive rare seeds from a distance, and which, having been unfavorably exposed, are brought to sprout with difficulty. The writer says: "I have vegetated seeds sent me from good hands who could do nothing with them, and where all other plans have failed, by enclosing them in a small piece of flannel soaked in a weak, warm solution of oxalic acid, and squeezed out nearly to dryness; this is enveloped in two or three folds of oiled silk, tied up and suspended by a string hung over the neck, so that the little packet may descend just to the pit of the stomach, where the heat of that part, in an incredibly short space of time induces germi-

nation. The seed of a Cassabar Melon I vegetated in this way in less than 24 hours, and after 38 hours' confinement it had a rootlet of an inch in length.

Hints on Fencing.

To the Editor of the American Agriculturist:

To save timber in fencing, without additional expense I propose the following plan, which I have adopted to some extent myself. It is this. The kind of fence in general use in the West, is the "worm fence," which occupies about five feet width of ground. On each side of this five feet I cut a ditch two and-a-half feet wide, and four inches deep, throwing the dirt on the five feet. Then, if stone can be conveniently obtained, a broad one is laid where each fence corner will be placed, in such manner as to make a rise of four inches. Thus it will be seen, that by the ditches, the throwing up of the ground, and the stone, a rise of one foot will be obtained, before any timber is used, and the elevation is of a more durable material than rails. Where stone can not be had, short pieces of timber, cut from portions of the tree that will not make rails, may be placed under the fence corners.

In favorable situations this ridge may be speedily made with the plow, by turning the furrow slices together. Deeper ditching and higher ridging, than here recommended, might be profitably adopted. Stock are not apt to jump from, nor into a ditch.

Building Fence.—On hilly ground the fence worm should always be laid commencing at the bottom of a hill. If, for example, the ground has a descent of four inches in the length of each rail, hen, by running the worm up hill, with rails four inches in thickness, each rail will lie exactly horizontal; on the contrary let the worm be laid downhill, and one end of each rail will be eight inches lower than the other, which operates against the permanency and beauty of the fence. The steeper the ground, the greater the necessity of following the directions here given. My plan in fencing is to commence my worm at a desired point, and proceed regularly up hill and down; always, however, placing the rails so that the downhill end of the first rail shall rest on the uphill end of the one below.

Preservation of Fences.—The ground on which the fence is built, should be neatly dressed and sown with blue grass seed, and then be kept free from such "border ruffians," as briers and elders. Where cattle and sheep are allowed to graze, there will be no trouble with these pests, but in grain fields it will be necessary to make a free use of the scythe in order to keep the fence corners clean. JAMES DENNY.

Putnam Co., Ind.

To PRESERVE HEDGES FROM MICE.—L. Humphrey, Windham Co., O., recommends cultivating a strip, say six feet wide on each side of the hedge, with Russia turnips, and leaving them in the ground during the Winter, we suppose as food for the mice. Mice would probably prefer turnips to "browse," though they are sometimes rather perverse in their inclinations. He writes that the turnips should be put in when the hedge is newly set, and kept as a permanent crop, part of which in the Spring might be valuable for the table or for stock. We think on the whole it would be better to make the fence of materials which mice can not destroy.

The *blemishes* of great men are not the less blemishes; but unfortunately they are the easiest parts for imitation.

For the American Agriculturist.

Take care of the Young Muscles.

The season of long hot days, short nights, hard labor, and short rests, has come, and it seems to me it were well to utter a word of caution to farmers, be they fathers or masters, who have the care of boys. Many a boy is ruined for life in these hard harvest days. Boys are generally ambitious to become men and do "men's work;" the father is glad to see so much "grit" and the lad of fourteen perhaps is allowed to take scythe or cradle, and go into the field with full grown men and see how near he can keep up. With what result? His "grit" keeps him along for a while, but the muscles of his arms, and far worse than this, those of his chest soon become strained by what is to him unnatural labor, and he "gives out." Yet the vital energies of youth are strong and he soon seems to recover his exhausted strength, and again he repeats his efforts. But the forces of nature each time rally more feebly, he becomes weak in the chest, his joints become enlarged, the action of the whole system becomes dull, the *animus* of youth is gone, in too many cases never to return. He enters manhood, not with the spirit that goes to daily toil with a song, and returns at evening with a shout, but with a spiritless step as if it were a hateful drudgery, and such to him it is. Farm pursuits become distasteful and are left at the first opportunity. We wonder sometimes at the iron constitutions of foreigners who seek their homes with us. The main secret is here. Boys are not put to *hard* labor there. You scarcely ever find a young Irishman of twenty that has ever handled a scythe, previous to coming here. It is considered there to be work only fit for full grown men. Think of this farmers when your boys want to "pitch in" with the men, and give them lighter toil, that shall give healthful exercise, not over-straining labor. A LOVER OF THE FARM.

"American Guano."

Repeated inquiries concerning this fertilizer, which is now extensively advertised, impel us to say something respecting its claims. We have delayed thus long in referring to the matter, hoping to find some ground for at least partly commending it. Could a valuable fertilizer be found anywhere in the Pacific Ocean, outside of the Peruvian domain, we should hail it as a boon to the cultivators of our country. We will even yet *hope* that the American Guano Company may discover some deposits which will prove worthy of being shipped to this country to be purchased as a manure.

But with our, not hastily-formed, views of what must be the constituents of any concentrated manure, to make it sufficiently valuable to warrant farmers in purchasing it at the cost of transportation from the Pacific, we cannot recommend our readers to buy the guano so far brought to this country by the American Guano Company. We would most gladly write otherwise, could we do so with justice to our readers. We have carefully studied the analyses published by the Company, have examined specimens of their articles as offered in the market, and have given due consideration to the recommendations which are set forth in the advertisements, circulars, and pamphlets issued.

The ground we have all along taken in this journal is, that the chief value of any fertilizer depends materially upon its *organic matter*, and very much upon the ammonia yielding elements contained in the organic matter. Thus: good Peruvian guano contains 15 to 17 parts of ammonia in every 100 parts. Remove half or two-thirds of the 16 per cent. of ammonia, and the whole is diminished nearly one-half in value as a fertilizer. This we think has been pretty fully proved by oft-repeated trial.

Again: bones, when perfectly dry and freed from fat, contain about *one-third* their weight of organic matter (chiefly cartilage,) and *two-thirds* of mineral matter (chiefly phosphate of lime). The cartilage abounds in the elements of ammonia, and yields that substance largely when decomposition or decay takes place. Bones, when finely ground, are a powerful fertilizer. (Our own experience and observation have been so conclusive on this point that we buy no other fertilizer than bone sawings—that is, bone sawdust—or bone-shavings.) But burn the bones, which destroys or drives off the organic matter, and you have all the phosphate of lime still remaining, and yet this substance is hardly worth the cartage as a fertilizer for any crop or plant. We are well aware that theoretical men say that the phosphate of lime from burned bones is not in a proper chemical condition to be appropriated by plants. But this is *supposition*. We contend, that if phosphate of lime were the great want of the soil or plant, the chemical changes constantly going on in the soil would reduce at least a part of the burned phosphate to a condition to be absorbed. Our theory is at least as good as the other, and we have to support us, the *fact* that unless there be *added* to the burned bones something which is itself a fertilizer, the bone ashes will not materially benefit plants. The super-phosphate manufacturers use sulphuric acid *and* an admixture of *more or less organic matter of some kind*. Our theory is, that the sulphuric acid and the added organic matter are, after all, *the* elements that produce whatever of benefit results from the use of manufactured super-phosphates.

We cannot here fully discuss the question o. mineral and organic manures. Those interested in the subject, will find it enlarged upon in the series of articles on manures, in our sixteenth volume. We can here only repeat the proposition stated above, viz., that:

To be valuable, as a direct fertilizer, a substance mus consist largely of organic matter, (either animal or vegetable,) and this organic matter must abound in ammonia yielding elements. (The alkalies, sulphate of lime or plaster, etc., are sometimes useful as *indirect* fertilizers. They act upon organic matter, and either fit it, or retain it, for the use of plants.)

Tried by the rule we have stated, the phosphatic guanos of the American Guano Company, and those of a similar character from other sources, such as the Mexican, Sombrero, etc., are not, and cannot be, of much practical value to cultivators. Let us examine the "American guano." In the Company's circular before us, we find the analysis of nine samples of guano from *Baker's Island*. They are similar, and the average composition of 1,000 parts, omitting fractions, is:

Water, 278,	Organic matter, 67,
Fixed salts, (or mineral matter,)	654.

Here are only 67 pounds of organic matter in 1,000 pounds, or say 135 pounds in a tun of 2,000 pounds. But what makes the matter worse, is, that the organic portion yields comparatively very little ammonia. Eight analyses of guano from *Jarvis' Island* show in 1,000 pounds an average of

Water, 182 lbs,	Organic matter, 103 lbs,
Fixed Salts (or mineral matter),	715 lbs.

The same objection lies against this as against the Baker's Island samples. Taking the Company's own analyses then as a guide, we are forced

to the conclusion that their guanos are of very little real value. Chance circumstances there may be, and doubtless have been, where increased crops have *apparently* resulted from their use, but these, so far as published, are not conclusive, and until we have some better reason than we have yet seen for a change of opinion, we must regard the guano of the American Company as not entitled to the confidence of cultivators.

We do not accuse the Company of fraudulent intentions. They may be themselves deceived. But we feel assured that the plausible arguments with which they are trying to convince farmers of the value of their fertilizer, are not founded upon a correct basis, and they are therefore leading people astray, when they induce them to pay $30 or $40 per tun for a fertilizer which, for the reasons above given, we think cannot be worth half that sum, at the best.

Transplanting, Easy, Safe, and Profitable.

We wish to impress upon the readers of the *Agriculturist* that it is a very simple and safe operation to transplant nearly every thing that grows. It is just as easy to transplant corn as cabbage plants, and this in the middle of the hottest day; and it is profitable also. Take an example. Here is a corn field planted in rows and hills three by four feet, which allows 3,630 hills to the acre. Estimating the yield on a good soil, with all the hills perfect, at 56 bushels per acre, we have about a pint of corn to the hill. But suppose we have 62 hills (one in every 60) deficient, there will then be a loss of one bushel of corn, with no less labor in preparing the ground and in the after cultivation, for the weeds should be hoed down on the vacant spots. The vacant hills usually amount to one in 15 or 20, taking the whole field together. But with a trowel, or other simple implement, a man will readily fill up sixty hills in an hour, or two at most, by transplanting from those which have an excess of plants. This could be done on a rainy day, and we doubt whether labor could be more profitably expended on the farm, in at least one half of the country, than in securing an extra bushel of corn by two hours labor. When the ground is wet it is easy to take a trowel or piece of shingle and divide a hill having superfluous shoots, lift out one side of the earth with the plants, and set them down where needed to fill in. This of course should be done while the plants are small and the roots not yet extended far, so that they may not be injured in dividing the hill. We have here taken the worst case and shown its feasibillty. In gardens, where higher culture is practiced, the profit of transplanting would be much greater.

A word on the mode of transplanting. During the second week in June, just after noon on one of the hottest days, we removed 200 large strawberry plants, carrying them half a mile. They were partly fruited and partly in blossom, and yet after the transplanting they continued vigorous and perfected a portion of their fruit, and this too, though not a particle of shade or protection was placed over them, and the following two days were hot and dry. The mode of transplanting was the same as we adopt for all plants.

The plants, of whatever kind, are taken up with as much undisturbed earth around them as may be practicable—cracking or breaking the earth severs a multitude of feeding and drinking mouths. A large hole is dug for each plant and a quart or more of water poured in. The roots are then dipped into the water and as it soaks away earth is filled in. *The top half inch of earth is put in dry.* This is important; a wet mass of earth will bake and shut out air and warmth, while the dry earth will soak up water from below to dampen it, and yet remain loose and friable. Plants set in this way have a moist bed below, and unless their roots are nearly gone they will go on growing—all the better for not being shaded even.

Since adopting the above mode of setting plants into water and covering with dry earth at the top, and not watering afterwards from above to pack the ground, we have not lost one plant in a thousand, and they have grown as well after transplanting as before.

Sow a Patch of Buckwheat.

There are many fields which from failure of the corn, or delay in Spring plowing, are lying comparatively idle. The grass is nearly run out, and thistle, dock, snap-dragon and other foul weeds are disputing for the vacant places. Although the labors of the present month are pressing, these patches should not be neglected, especially when there is a prospect that all the grain we can raise this season will be wanted at good prices. Even if these anticipations should not be realized, a good crop of buckwheat will greatly help to fill the right side of the farm balance sheet.

If sown during the first two weeks of the present month (July) there will be a good chance for it to fill during the cool weather in September. Where there are "swales" ordinarily too wet to plow for corn in the Spring, cropping with buckwheat will often be found a good preparation for seeding down with Winter rye after the Summer crop is harvested.

The Wheat Insects—A Request.

We intended to give in this number a full description of some of the insects most destructive to wheat, illustrated with several engravings, but could not get the drawings quite completed in season. Next month we shall have an interesting and instructive illustrated article. The object of this note is to request our readers who reside in localities where the insects of various kinds are now at work, to send us immediately any items in their possession respecting their habits, etc., especially of the *Midge*, and its parent the clear-winged wheat fly (*Cecidomya Tritici*). This midge or gnat, or weevil, as it is sometimes called, is now doing most of the injury in the wheat fields of the North and Northwest. It is the small yellow or orange-colored maggot, that is found upon the unripe kernels of wheat. We have been unable, so far this season, to find specimens of either the fly or maggot. We would like to show them engraved on a magnified scale, and will be obliged to any one who can send us specimens during the first week of July. We have, already engraved, specimens of the chintz or chinch Bug, the Hessian Fly, and Grain Weevil (*Calandria granaria*).

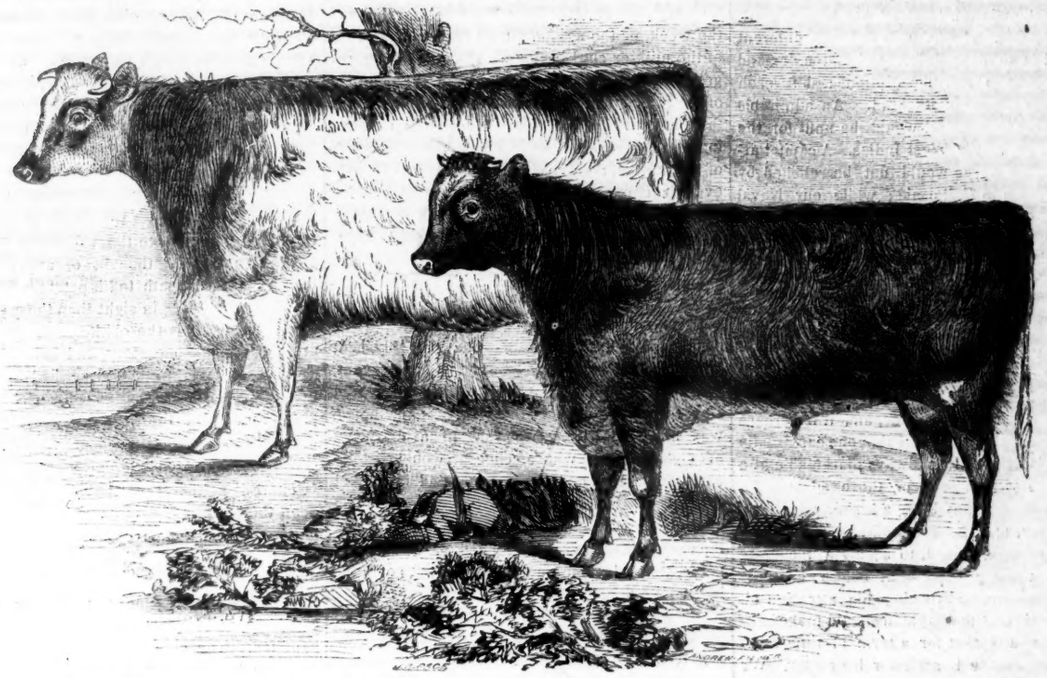
Sow Turnips.

Some farmers have talked and written against turnips for stock, and justly so, if their own experience were the test. Cattle or other animals fed almost exclusively on turnips, for weeks together, will not thrive well. But there is no doubt that a moderate feeding of turnips with dry fodder is better than dry feed alone. Every keeper of live stock should raise some turnips. They can be grown at little cost. Every one can at this season find some ground that may be devoted to their culture. The seed may be sown at any time this month (July). Where a drill-sower is not at hand, and it is not convenient to harrow or dig it in, the seed may be sown broadcast upon the surface. A large part of it will generally take root, even if left uncovered. We intend to go over our own corn and potatoes, and through the vegetable garden, this month, with a dish of turnip seed and a rake or hoe in hand, and where ever there is a square foot not certain to be needed by plants already growing, the seed will be scattered, and raked into the surface a little. It will be sown between the rows of the earlier varieties of corn, and that to be cut up for fodder; also among early potatoes, between the rows of peas in the garden, etc.—in short, wherever a single turnip can have room to develop itself, even late in the Autumn, there a few seeds will be left—the superfluous plants to be removed when they crowd each other. In this way we shall get a good supply at very little cost. They will probably be stored in the cellar, or in covered heaps, at less than 10 cents per bushel. Having seed, we sow the Long White French variety exclusively, but almost any variety may be sown up to the close of July—the earlier the better for ruta bagas.

The Crops—The Frost.

So far as we can gather, from correspondents, and from various other sources of information, the crop prospects are good, taking the country as a whole. The newspapers have been filled with accounts of damage by frosts, rain, drouth, etc., and parties who have on hand a stock of last year's products to dispose of, have been interested in magnifying every unfavorable report. That the untimely frosts in the second week in June did severe damage in some localities is certain, but it is equally certain that the injury was confined to limited areas. It is impossible, as yet, to determine the exact outlines of the districts where the cold operated with decided injury on the whole, but enough is known to warrant us in saying that, of all the field, garden, and orchard crops in a condition to be seriously affected by the cold snaps during the week beginning June 5, not one plant in four hundred suffered materially—that is, taking into account the whole country north of the latitude 38°. South of this no great harm was done. In special localities the loss was very severe, and for the sufferers we feel a strong sympathy. We hope good weather, the rest of the season, will, in part, repair the loss experienced. Careful culture of the crops remaining, and an increased space devoted to buckwheat, turnips, etc., will be some help.

It seems to be the economy of Providence, that individuals must at times suffer for the general good. History teaches that even the worst calamities, of war and pestilence, which produce intense suffering and desolation to individuals and whole countries, are yet overruled for the benefit of the race. So it is with such a calamity as the recent frosts. Myriads of devouring insects have been destroyed, and other beneficial results will continue to be discovered; and could we look over the whole ground, and then look into the future, as only He can who seeth the end from the beginning, we doubt not that we should all, even the most afflicted, be thankful for the frosts of June, 1859. We know by experience, that, when in the midst of trial, it requires no little effort for us to have faith in the doctrine that "all things are for the best." The child, while smarting under the rod of correction, will be slow to believe that the discipline is for his ultimate good. So it is with us as grown up children. Yet, in after years, we can almost always look back with satisfaction upon the results of experiences of the most severe kind.



SHORT-HORN CATTLE—Bred and Owned by C. M. Clay, Whitehall, Madison Co., Ky.

Pixy 2d, (American Herd Book, Vol. 3, p. 601)——Fordham (Royal?) Duke of Whitehall. No. 3389 (American Herd Book, Vol 4, p. 203.)

Written for the American Agriculturist.—Prize Articles.

The Dairy....VII.

THE MANUFACTURE OF CHEESE.

We say *manufacture*, instead of "making," because the various manipulations to which milk is subjected, before it assumes the shape and consistency of a sound healthy cheese, are several and various, and the skill, and knowledge appertaining to them approach nearer a scientific profession or pursuit, than would be supposed from the simple manual labor connected with the operation.

There is, probably, no one article produced on the farm of such various quality as cheese—even upon soils and localities alike in all that appertains to the material of which it is composed. The difference is only in the manufacture. We have already said that some soils and grasses and localities will not produce cheese of the best quality at all. We have said all that is necessary on that score, and are now to speak of its production on suitable lands in suitable localities, with the proper grasses, in a good dairy country.

The qualities of a *good* cheese are various, according to the taste and education of the consumer. One is dry and hard. Another is dry and crumbling. One is soft, moist, and easily falls to pieces in cutting. Another is soft, tenacious and elastic. One is porous, almost like a honey-comb. Another is less so, like well risen bread. Still another is compact and unctious. One is strong, and high flavored, piquant in taste, leaving its flavor on the palate almost for hours. Another is mild, savory and creamy, leaving a rich aroma, and every way delicious. Each one of these qualities belongs to first class cheeses, more or less given them by the constituents of the milk from which they are made, and their modes of manufacture; some cheeses of quite opposite qualities are made on the same farm, while others are the more natural product of different soils and situations, equally good—but with a different way of making, and possessing an altogether different character. The cheeses of the granite hills and valleys of New-England differ from those of the secondary soils of Herkimer, Oneida, and northern New-York, while the latter differ from those produced on the shales of the "Southern tier," and northern Pennsylvania; and they again are a different article from the cheeses made on the slaty clays of the Ohio "Western Reserve"—yet all excellent and each preferred by those most partial, for any reason, to their peculiar and different flavors.

The very best, and the very worst cheeses are produced in each and all of these dairy regions, the difference between them being only in their mode of making; and we propose to speak very plainly of the whole process of manufacture. In the first place, we contend that no cheese can be of the best quality *uniformly* unless it is made in considerable quantity—at least equal to one cheese daily, of thirty to fifty pounds weight; and if more, the better. Secondly: What is called a "family" cheese, made from three or four cows only, in the common household and multifarious labors of an ordinary farm family is rarely very good, for the reason that different "hands" often run up the curd and make the cheese, without proper system or attention. A woman usually does the work, also, and she, troubled with common household cares, is unable to dabble over the inexorable demands of a cheese-tub—no disrespect to the woman either. The writer has never tasted a first quality cheese taken promiscuously out of such a lot. It will thus be seen that the manufacture of cheese, different from that of butter, must be in considerable quantities of material. There ought not to be less than ten cows for a cheese dairy, and fifty to a hundred, with proportionable appliances, are better. A man or woman, whose sole business it is for the dairy season, should superintend the whole operation, from receiving the milk from the cows, to placing the cheese on the shelf in the cheese-room. A man is better than a woman for a large dairy, for these reasons: Men are stronger, enabling them to do heavy lifting, which is oftentimes required. They are from education and habit of thought and investigation, better enabled to judge chemically and experimentally of the various conditions of the milk, curd, and other ingredients composing its parts; and, as it is a heavy labor, when on a large scale, it is too severe for any woman but those of gigantic stature and strength. In short, a woman can better do some other in-door work. We believe in the emancipation of woman from the drudgery of a heavy dairy. It is every way better suited to the capacity of a man, and a man only should do it. The "wimmen folks" can do the washing, scalding, and brightening up of the pails and tubs, and looking after the cleaning, and dusting departments requiring the use of broom and brush.

A dairyman about to establish himself in cheese-making should, at the first, select the description and quality of the cheese he intends to make, and having established it he should make that, and no other so long as he finds a good market for it. It is difficult to make two or three different kinds of cheese in one dairy, and each good, or the best of their kind. Better adopt one only, and stick to that. Your cheese, if good, soon acquires a reputation, and will be sought after at the top price of the market, and you make a sure thing of it—like a favorite and old established brand of flour, "Richmond City Mills" for example, or pure "Genesee," as in old times, before it was adulterated, and "scratched" by mixing with it "bald face," "stumptail," "chess," and "cockle," from Chicago. Aside from our domestic cheese market, which is throughout the United States beyond the immediate dairy districts themselves, our foreign markets are various. Not only in several countries of Europe on the Atlantic coast is our cheese sold consider-

ably, but the West Indies, South America, and the Pacific coast, and even England, buy largely of us. So many different people, with so many different tastes, and in so many different climates demand different qualities and descriptions; but each wants *a good* cheese of its kind. An admirable cheese to ship to England would be unfit for the Mediterranean, or the West Indies. A capital article at Buenos Ayres would not be relished by our countrymen in California; while our Naval ships going on a three years cruise, traversing all the climates of the world, would require a cheese which could only be cut with a hatchet—and still the cheese must be a good one.

Yet, there is a sound, high flavored, common cheese made in the great majority of our dairies which is universally popular and marketable *wherever it can be carried and hold its flavor and keeping until wanted for consumption*; and this the mass of our dairymen produce, and it is perhaps the best description of cheese that one can usually adopt for his dairy. It is always marketable at a fair price. *Fancy* cheeses, or those adapted for particular markets may bring a higher price for a term of years, and be more profitable for a short run—long enough, indeed, to secure a moderate fortune in making them—but before adopting their manufacture, and turning his attention altogether to them, the dairyman should make himself secure of a market for a term of time sufficient to compensate himself for his outlay. We can make very tolerable imitations of the different European cheeses here, but their *close* imitation is difficult, and usually not profitable. We have the Cheshire, the Gloucester, and Stilton cheeses from England, of widely different flavor from each other, and from ours, to which many foreigners, and even native Americans in our cities are partial. We have also the Parmesan, and Swiss cheeses from the hills and valleys of those fine pastural countries, Parma and Switzerland, differing again in quality, and unlike any others from Europe, or from this country. All these have been imitated with tolerable success with us, but not so successfully, or profitably as to become staple productions of any considerable number of dairies—proving distinctly, as we have elsewhere remarked, that different soils and climates produce their own particular flavors and qualities in cheese.

Connecticut cheese for more than a century past, and so long as that State could produce enough of it, was the favorite of Baltimore, Richmond, Norfolk, Charleston, and Savannah. The counties of New-York, north of the Erie Canal, for some years have found a portion of their cheese going to England; the "Hamburgh" cheese of Western N. Y., has found its peculiarly rich and buttery flavor a favorite in New-York, and Philadelphia; the compact little box cheeses of ten or twelve pounds weight made by the thousand in the extensive dairies of Trumbull and Ashtabula, in North-Eastern Ohio, where the entire curds of two or three townships are daily worked up in a single establishment, have found a market in South America; while the plump and portable "Pine Apple" Cheeses made by different individuals throughout our entire dairy region find a ready market all over the world where American cheese is consumed.

Should the reader of this article ask why our cheeses can not all be made exactly alike in quality and flavor; and why, as is the fact, that scarcely two cheeses in one dairy are just alike in taste, and a wide difference is often found in them, the answer is, that there is no article so easily affected in taste and quality by outside influences. Heat, cold, moisture, dryness, the condition of the grass on which the cow is fed, and the bodily condition of the cow herself for the day, the week, or the season; the exact temperature of the milk or curd in the process of making, together with any little irregularity in the quantity of the seasoning, as salt, rennet, &c., affect the taste and quality of cheese. Hence the exceeding importance of well understanding every branch of the subject, and the chemical relations of whatever is connected with its composition. No great amount of science, indeed, is necessary for this purpose but watchfulness, skill, experience, and attention; and without all these combined, and in very considerable degree in the maker, good cheese can not be produced. A man with a single idea, if it be a *cheese* idea will do it, equal to Professor Silliman—and probably beat him in running up a curd—but he must *know* that, and know it well. About the dirtiest household I ever knew for decent folks (and his dairy-house was not much better), was that of a dairyman of eighty cows whose cheese would readily command a cent or two more a pound in market than his neighbors. But he *did* know how to run up a curd, and mix all the ingredients for a tip-top cheese, and always succeeded. My own opinion is, that a little more tidyness would not have injured its flavor.

Blinks from a Lantern..... IX.

BY DIOGENES REDIVIVUS.

A PRACTICAL FARMER.

The world moves, and no part of it faster than the farm. One proof of it is to be found in the shock we receive from scenes long ago familiar, when we come upon them as a present reality. The old style farmer of thirty years ago, still lives in retired places, and it has not been necessary to preserve him in amber to bring him down to us in unabated perfection. There are by-places, even in the most civilized parts of the country threaded by railroads, where the specimens are to be seen, where hardly a modern innovation is visible in all the surroundings. These examples startle us a little as we pass to them, from farms where all the modern improvements are adopted. We may have been familiar with all the scenes in our youth, and yet they strike us as novelties. These relics of the ancient regime can not always last, and it is desirable that a few of them should be preserved in your pages, that posterity may see as in a cabinet, what sort of tillers of the soil preceded them.

As I passed up through a retired valley, lantern in hand on my laborious search, I came upon one of these antiquities. He rejoiced in the sobriquet of "Practical Farmer," from the fact that he was always ridiculing the improvements of his neighbors. The boys had dubbed him "Old Practical," though he was hardly an old man, being not far from fifty, but inheriting the condensed wisdom of his father and grandfather, and jogging on with mule-like pertinacity in the most select stupid ways of both of them. Ezra Hanks, is really ingenious in contriving, how *not* to farm well. Were he conscientiously opposed to accumulation, he could hardly adapt his means more wisely to make the ends of the year just meet, without a dollar left over.

Ezra lives in a quiet rural spot between two granite ridges, and if the right man lived in it, it might be called Happy Valley. I have rarely found a more perfect Arcadian view, than "Old Practical's" two hundred acres as seen on one of these Summer mornings. The most of it is plain land, a part of it intervale, threaded by a brook, where the speckled trout shows his golden sides, and cowslips and dandelions upon the bank keep him company. It is marvelous that Ezra should have thrown a bridge across the brook, giving a picturesque expression to the valley, but he would never own that he thought of any thing else, than a better cart path to his potato patch. There is no other building in sight than those pertaining to this farm. It is the old homestead—of a hundred years ago—one story, and belonging to the style of architecture best described as the cube, though not put down in the books. The barn is a perfect match for the house, in shape and coloring—all of neutral tints, sober wood color, varied only with patches of moss.

There is neither shed, hovel, nor barn cellar, upon the premises. He does not believe in manure factories. "You see, Mister, I'm a practical farmer, and don't believe in them books and papers. Folks talk now-a-days about manufacturing fertilizers—diluting manure with muck, composts, and all that. Now you see, that's all gammon. The only manure factory I allow on my farm is the krittur's stomach. That is the Almighty's contrivance, and I guess man aint agoin to improve on it much, any way. And when you have got the stuff made after the Divine pattern, I want to know if you spose you are going to make it any better by mixing it up with su'thing forrin to its natur? Manure is manure, and dirt is dirt, and it stands tu reason, if you mix 'em, you aint agoin to make 'em all one. This cartin so much stuff intu yer barn yerd, is all nonsense. It is the dung that brings the crops, and as to the dirt, I guess there is about enuf of it in the ground alreddy. It is the kaster-ile that duz the fissicking, and taking water don't help it a bit. Them's my sentiments."

Ezra's land is so smooth that he might easily use horses for plowing and carting. But he prefers the bullocks, with a straight yoke, walnut ox bows, and wooden bow-pins, with the two wheeled cart. "Them four wheeled konsarns, ye see Mister, is a good deal of an extra load for oxen to drag reound. They tell about easin the necks of the cattle. But what's an ox's neck made so thick and stout for, if taint to bear a load. I take it, it is a pervarsion of Natur, not to use a thing for the end it was made for. What is the use of treating an ox's neck, as if it were a pipe stem, jest ready to snap off. Mine never broke, and I have used 'em nigh upon thirty year. I never heerd of sich a thing."

This practical gentleman still clings to the old Dutch plow, with wooden mold board, covered with sheet iron, or old saw plates.

"Folks are gittin crazy abeout plows in these times—hardly any thing but them cast iron konsarns in this naburhood. They are jest no kind of a plow at all. The stuff in 'em is nothing but pot metal, and the minut it hits a stone or stub, away it goes—and you've got to stop your team, to git a new nose or mold board. One has to keep all the extra fixings of a plow on hand all the while. And then when they du plow, they go down so all fired deep, they turn up all the yaller dirt there is in the field, and spile the land. You can't hardly grow mullens, where one of them things has been along. I don't like the workin on 'em at all, they tucker eout the team so bad it makes 'em look as if they'd been drawn

through a knot-hole. I'd ruther have one of my plows, than all of them things you can skeer up. When it gets broke, a black-smith can mend it. It turns up nothing but the black dirt, and it don't take more than half as much team, as them new fangled konsarns. I don't want any of your book farming areound me, I don't."

This practical farmer with his two hundred acres, keeps about even with the world, and allowing nothing for his own time, gets about two per cent. per annum on the capital invested in stock and land He is an interesting specimen of antiquity whose natural history is worth studying.

Bees and Tin Pans.

To the Editor of the American Agriculturist:

At the time of the little skirmish carried on in your columns, between Messrs. Quinby and Mendenhall, respecting the habits of the honey-bee, I felt very much tempted to come to the rescue of the latter gentleman, armed with some stubborn, inexorable facts. I refrained, however, from offering my humble intervention, in the hope that the truth would be elicited just as well without it; and I would have remained quiet in my retirement to this moment, had I not been *warmed up* again on the subject, by a little circumstance which occurred a few hours ago.

Among my "rural surroundings" there are a few bee-hives, to which for my instruction and amusement no less than for my comfort, I am in the habit of paying some little attention. About 11 o'clock this morning, I was suddenly called home from the field, by the alarmingly protracted sounds of the dinner-horn and sundry minor uproarious contrivances, and found my little family most violently exerted in preventing a young swarm from taking "French leave." At the first glimpse I caught of the state of affairs, I had but little hope of reclaiming the fugitives, who were already widely scattered high up in the air, not less than 30 or 40 yards distant from the parent hive, say at an angle of 45 or 50 degrees, and seemed obstinately bent upon carrying their declaration of independence into effect. The vanguard of the swarm, which appeared to contain about two-thirds of the whole, and among which that peculiar hum, said to be the voice of the queen, was distinctly audible, made several attempts to escape in a certain direction down the valley, but were seemingly induced to retrace their flight, so soon as we followed close up and *under them* with the loudest instruments of our orchestra. The remainder of the swarm, under which the children kept up a respectable tin-pan and cow-bell charivari, appeared more hesitating in their projects, and made but two feeble efforts to follow the van, who, finally conquered by the noise and confusion, came to terms by settling near the top of a young shade tree, directly in the rear of the bee-stand. The balance soon followed suit by clustering on a smaller limb immediately above that which sustained the main body of the colony. Half an hour afterwards the submission of the rebels was complete, and they were quietly transferred to the new quarters kept in readiness for them.

While taking a little shady rest from the fatigues of this operation under 80° F., I picked up the last number of the *Agriculturist* and turning to the "Apiary for May," my eyes fell upon that autocratic sentence, "*No noise is necessary to make them cluster*," and this right in the teeth of my hardly concluded experiment, and with the proof to the contrary still standing in big drops on my brow!

Nor is this my first experience to the same effect. Since I procured my first hive, eight years ago, I have lost three swarms from no other *visible* cause than the neglect of the precautions of a family orchestra. A neighbor of mine who has kept bees for more than twenty years, and with considerable success, says he has never failed to save any swarm whenever he resorted to these measures. Many other old residents, familiar with bee-keeping, have told me the same thing; in fact I never heard anything else on the subject since I was a boy; the universal notion being that the noise, in drowning the voice of the queen, prevents the swarm from noticing her signals. Now I would ask Mr. Editor, is all this a delusion of the senses? and if so, what guarantee have we that our fallible eyes are not deluding us when we read the monthly articles of Mr. Quinby? And at any rate, how are we to make our bees believe what that gentleman writes about them, and make them behave accordingly?

By doing your best towards solving this perplexing question, you will, no doubt, oblige hundreds of your faithful readers and especially your friend and Ob't. Servt. "DODDRIDGE."

Doddridge Co., Va.

REMARKS.—We confess to have been somewhat loth to adopt as an article of faith the *dictum* of later apiarians, that the tin-pan-and-dinner-horn orchestra has no effect in arresting the flight of swarms of bees. Though having little recent experience with them, we have spent our earlier years on the farm with 50 to 100 swarms, and *then* a full band of extempore music was considered a sure remedy—if the said band were mustered in season. We well remember that amid the sober hard-working realities of boyhood farm-life, the attempted flight of an issuing swarm was a much desired event, as it gave a fine opportunity for indulging in what nearly every boy delights in, a regular *charivari*. It is hard to give up a faith, born and bred in young bones, yet we have almost been induced to do so at the fiat of those who ought to know. We will give one item from experience and then leave the apiarians to defend themselves.

In 1836, while out at the wood-pile, we heard in a south-westerly direction the well known sound of a swarm of bees on the wing. Nothing doubting the efficiency of the tin-pans, and a six-feet dinner tin-horn, we instantly called out the "band" and had the players all ready by the time the bees were over head—at a hight of some twenty-five feet. The noise appeared to confound the swarm, and they presently alighted in the orchard, were hived, and remained peacefully with us, and increased to half-a-dozen swarms.—ED.]

Bottling up "Sun Strokes."

To the Editor of the American Agriculturist:

A few years past, I've heard people talk a great deal about getting "sun-struck," and the City newspapers every Summer have many accounts of such cases in the streets. I used to think when I first heard about it, that it was something that came down from the sky like a stroke of lightning, only there was no noise with it, and that if we kept in the shade there was no danger. But one day I was on the hay-mow stowing away hay under the rafters—if you have ever been there you know it's a powerful hot place—and my John was pitching it in pretty strong. when all of a sudden, I began to feel very queer. My limbs trembled and it began to look misty and dark like, so I sung out to John to hold on. After coming down and sitting in the air a little while I felt better, but I didn't go up there again that day. I was telling my symptoms to the doctor, next day, and he said, "you came near being sunstruck." That struck me with a new idea, and I learned that the danger is not from a bolt of sunshine, but from getting over-heated, and that there is greater danger generally in the sunshine, only because it's hotter there.

Since then, when I've had any very trying work to do in hot weather, I've turned out to work too or three hours earlier in the morning, and then taken an extra nap in the heat of the day, letting the teams rest at the same time, and as I am not afraid of being moon-struck, I sometimes keep to work in the evening, especially when there's a good harvest moon.

But there's another thing I've learned which some do not know, perhaps, that sun-strokes can be bottled up. Franklin bottled up lightning, but I can tell some folks how to keep sun-strokes in a bottle or jug where they wont hurt them. Let them just tie the cork of their whiskey jug down tight, and as long as the string holds they will not be in much danger. If you put a man between two fires it's a wonder if he does not get burnt; so when the fiery sun is on the outside and the fiery water on the inside, he is in great danger. JONATHAN.

For the American Agriculturist.

My Neighbor and his Pigs.

MR. EDITOR:

When about buying the farm where I now reside, I very naturally of course asked the former occupant about the neighbor I would have on the other side of the road. He replied that he was a "clever man enough, though he had his faults," and as I did not expect perfection in this world, I made no further question. But there is "a thorn in the flesh"—my neighbor keeps his hogs upon the road. No one knows the amount of annoyance I have submitted to these many years, notwithstanding the mildest suggestions and requests with regard to the unhappy liberty of those hogs. So this year when I heard the preparatory squeals, and announced the ominous fact in the family, wife was seized with a sort of despair, and advised to sell out and go away. Little Tommy declared war in the stoning line, and I bethought me of writing for aid to the *Agriculturist*.

What can I do? I do not feel as though I could 'sell out and go away' from all the comforts and luxuries that by hard labor I have got around me; all the trees I have planted for fruit and ornament; all the conveniences and niceties I have added to the house; and all the improvements I have made in the fields, that begin to look so much like living. Besides, I have grown attached to the hills and the vales, and the belt of forest that forms so pleasant a feature in the view.

Wife asks whether it is best to plant the flowers this year as usual in the front yard, since if the gate should be inadvertently left open for a moment, our neighbor's hogs would have their noses again under the dahlia-roots, and a good time generally, among the flowers. The sad experience of other years would give a negative answer, since not being a Crœsus, and therefore not rich enough to keep a dog, we are obliged to content ourselves with a "shoo" and a "stoboy," which seems to be very mild means, with the devastators.

We have all received standing orders again not to enter by the front way, when coming from the street, for fear of tracking the "droppings" through the hall and over the carpet, the peculiar odor of which has caused so much washing and scrubbing heretofore, and required extra shoes to make us presentable in the house.

There is another reason why I am annoyed. I take pride in farming, and as neighbor's hogs are not quite up to the standard of those shown at the Exhibitions, and as they are almost always on my side of the road, I am afraid that the passers-by will think that they belong to *me*. I am very far from saying, however, that neighbor's hogs are not the best calculated for their condition, they being turned out with the injunction of "root hog or die." The necessity of long snouts and "great power of face," with a race-horse build in other respects, is apparent, and if I was not so much engaged, I think I might make my fortune in the modeling of a plow after these hogs' noses, that would have in great perfection, those prime requisites "complete inversion of the sod, with thorough pulverization." You gave a picture of one of them last year, so perfect that I think your "artist" must have been this way for his model.

I am told that the "law" is on my side—that my neighbor has no right to keep his hogs upon the road, rooting up the sod along my door-yard fence, and leaving nuisances at the front gate. But how can I prosecute him when we are on such intimate terms—he borrowing all my things from first to last in the season—besides, he would "beat" me if the case had to be tried by a "jury of his peers."

Mr. *Agriculturist*, could you not write something that would make my neighbor take away his hogs from the hole they have dug at my gate, and where they lie the most of the time? Could you not say that if you had a tiger you would as soon think of leaving him at large in the public street, as a hog? or that if he had a proper hog-pen, and threw in all his refuse litter with swamp muck as an absorbent, he might manure four acres a year in the highest style of the art? As my neighbor has the reputation at the tavern of being a remarkably shrewd man, at least in politics, where he is an oracle with the loungers, and treats them to his views on public affairs, with other treats, perhaps the four-acre suggestion would be the feather that would turn the scale—and as wife has advised, and I approve of, making our neighbor a present of a year's subscription to the *Agriculturist*, he will be sure to see it, and thereby we be happily rid of the hogs that watch so constantly at the front gate waiting for the waters to be troubled. We shall cling to this as our last hope.

SUFFERER.

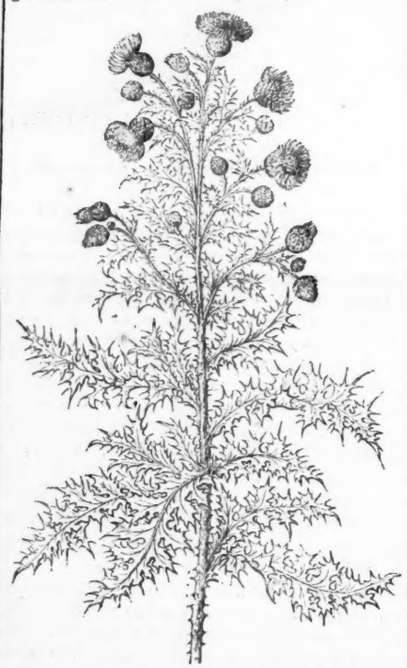
REMARKS.—"Sufferer" has a hard time of it, but if the adage be true that "misery loves company," we can assure him that he is very far from being alone. We could write from "experience," and feelingly too, but not more so than "Sufferer" has done, we suspect. However, we advise to send your neighbor the *Agriculturist*, as you propose, and if your statement of the case does not open his eyes to what has, *perhaps*, been an oversight hitherto, let us know, and we will level our trusty old shooting-iron at him, or rather at his hogs, (loaded with rock salt, of course—not lead). It is a great "piece" for scattering shot, and while shooting at the hogs above named, mentioned, described, and anathematized, some stray slugs (of salt) may chance to hit some other hogs we wot of. A variety of other remedies are down in our note-book, such as live fences, sundry chemical experiments upon swine-flesh, grain prepared in sundry ways to be planted on *our* side of the road—not to be *fed* of course, but simply left there for growing, etc., etc., etc., etc. But we trust the first named remedy will be all sufficient.

ED.]

The day on which idle men work and fools reform, is—to-morrow.

The Canada Thistle.—(*Cirsium arvense.*)

Last month, p. 186, we referred to a very valuble work on "*American Weeds and Useful Plants*," by Dr. Darlington, revised with additions by Geo. Thurber, Prof. of Mat. Med. and Botany, in the N. Y. College of Pharmacy. This work could scarcely have fallen into better hands. Prof. Thurber, has taken hold of the matter with much energy and abundant ability. We have long desired a work of the character of this, and we only wish it were a little less scientific, or rather, more adapted to the reading of the unlettered masses, for few subjects possess more importance or deserve to be more studied by cultivators at large than that of "Weeds." This book, however, contains a great amount of information useful to all, and we would advise every one to possess himself of a copy. Both as a matter of interest, and as a specimen of the character of the book, we present below an extract upon that well known pest the "Canada Thistle." The engraving will be recognized as a faithful representation of this plant. We copy the description precisely as given in the book:



FIELD CIRSIUM. *Canada Thistle.* Cursed Thistle. *French*, Chardon aux Anes. *German*, Die Acker Kratzdistel.

Rhizoma [root-stalk] perennial—creeping horizontally 6 to 8 inches below the surface of the ground, and giving off numerous erect biennial branches. *Stem* 18 inches to 3 feet high, slender and smoothish—the branches slender and lanuginous. *Leaves* 4 to 8 or 10 inches long, sessile and slightly decurrent, smoothish on the upper surface, sometimes arachnoid-lanuginous beneath—the radical ones curled or wavy. *Heads* half an inch to two-thirds of an inch in diameter, terminal, sub-pedunculate; *scales* smoothish, minutely ciliate. *Florets* palish lilac-purple, with whitish anthers, perfect or the heads dioecious by abortion. *Akenes* [seed] linear oblong, slightly 4-cornered; *pappus* [down] finally longer than the florets.

Fields and way-sides: Northern and Middle States: introduced. Native of Europe. *Flowers* July. *Fr.* August.

Observation. This is, perhaps, the most execrable weed that has yet invaded the farms of our country. The rhizoma or subterranean stem (which is perennial and very tenacious of life), lies rather below the usual depth of furrows—and hence the plant is not destroyed by common plowing. This rhizoma ramifies and extends itself horizontally in all directions—sending up branches to the surface, where radical leaves are developed the first year—and aërial stems the second year. The plant appears to die at the end of the second Summer; but it only dies down to the horizontal subterranean stem. The numerous branches sent up from the rhizoma, soon cover the ground with the prickly radical leaves of the plant; and thus prevent cattle from feeding where they are. Nothing short of destroying the perennial portion of the plant will rid the ground of this pest; and this, I believe, has been accomplished by a few years of continued culture (or annual cropping of other plants, that require frequent plowing, or dressing with the hoe.)—so as to prevent the development of radical leaves, and deprive the rhizoma of all connection or communication with the atmosphere. The following notice of this annoying weed, from CURTIS' *Flora Londinensis* may not be uninteresting to the American Farmer: "*Vitium agrorum apud nos primarium est* [it is the greatest pest of our fields] LINNÆUS observes in his *Flora Lapponica*. The same may be said with us: and we have bestowed on this plant the harsh name of *cursed*, with a view to awaken the attention of the Agriculturists of our country to its nature and pernicious effects. "Repeated observation has convinced us that many husbandmen are ignorant of its economy—and while they remain so, they will not be likely to get rid of one of the greatest pests which can affect their corn-fields and pastures. Of the thistle tribe the greatest part are annual or biennial, and hence easily destroyed. Some few are not only perennial, but have powerfully creeping roots—and none so much as the present. In pulling this plant out of the ground, we draw up a long slender root, which many are apt to consider as the whole of it; but if those employed in such business examine the roots so drawn up, they will find every one of them broken off at the end; for the root passes perpendicularly to a great depth, and then branches out horizontally under ground."

Two or three other species of Cirsium are frequently to be met with, (viz.: Cirsium *muticum, Mx.*, with the heads not spinose—and Cirsium *altissimum, Spreng.*, with the stem leaves not pinnatifid): but, as they do not incline much to infest the open grounds or farm-land, I have not judged it necessary to notice them more particularly here.

Exterminating Briers.

In fields newly cleared of wood, an abundant growth of blackberry, raspberry and other briery plants usually spring up from seeds carried there by birds. These seeds have been waiting for the sunshine to bring them to life. Burning the brush and rubbish over them gives a fine top dressing, from which they will thrive with great vigor, often requiring years of thorough culture with hoed crops to eradicate them. We have found pasturing such fields with sheep an effectual remedy. They are very fond of the leaves and tender young shoots, and will keep them so closely cropped down, that they have no chance for life. The following year the land can be plowed with much less difficulty, than where a thicket of rank briers fully armed, disputes the passage of the team.

"John," said a father to his son one day, when he caught him shaving the "down" off his upper lip, "don't throw your shaving water out where there are any barefooted boys, for they might get their feet pricked."

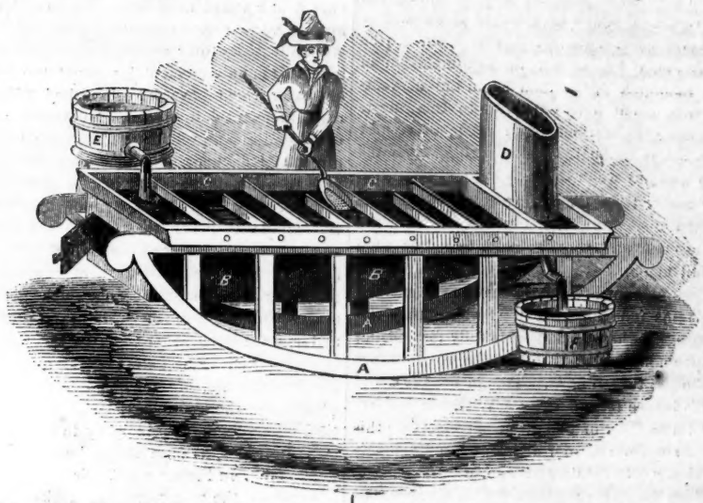
Are Maple Orchards worth Preserving.

This may be considered a silly question by many who own valuable orchards of the beautiful Rock, or Hard Maple trees, and annually make their own family supply of sugar from them, or much more, and where the land they occupy can not be profitably devoted to cropping. We presume it may on the first thought, be so considered by others who have sugar orchards growing on lands which may be worth fifty to a hundred dollars an acre for cultivation.

But, as we ask the question in all sobriety, for information, of those more conversant with the subject than ourselves, and from whom we would gladly obtain light, we will offer a few suggestions as they occur. To start with: We concede the utility and excellence of *well made* maple sugar. Three pounds of it are worth as much for sweetening as two pounds of New-Orleans, or West India sugar—not more. Maple molasses also holds about the same proportion in value to New-Orleans, or West India molasses made from the sugar cane. Such facts, we presume, no advocate of the maple sugar, or molasses will deny. We also know that there are thousands of beautiful sugar orchards scattered over the northern States, on hills and rocky lands—the best of all for sugar production—which are of little value for purposes of either cultivation or pasturage merely, where a "sugar-bush" is the best investment that can possibly be made of them. Then, again, there are other lands where sugar orchards now grow, and sugar is made from them, which *are* of the first quality for any kind of cultivation, and which may yield two or three times as much in annual farm crops as they yield in sugar: and to these our question will more readily apply.

We take it that a farmer only gets *one* good yield of sugar in an average of three years, at the best. *Some* sugar may be made *every year*, we admit; but, taking one year with another, one crop in three is quite an average. The year 1857 was extraordinary, and for one such, six, eight, ten, or a dozen years will not give its equal; but hearing such wonderful facts of the sugar orchards in such a year we are apt to draw our conclusions that all are so, and make up our opinions accordingly. Then, again, sugar orchards must be devoted to that object alone. They can not be plowed nor cultivated in annual farm crops. Grass for pasturage is all that they can yield, and but little of that, in a very inferior quality for cattle. As a rule, they may be said to be of little value for any other purpose whatever. Again, level or clayey lands will not yield half the sugar that hilly lands of porous, open soil will do.

We have seen within a few years past, as agricultural lands have advanced in price, a great many sugar orchards abandoned and cut away, from the fact that farm crops have increased in value by the construction of railways, or the opening of other facilities for getting crops to market, showing the conviction that they could not longer be profitably devoted to sugar-making. The late developments with sorghum, also, have thrown up a new element for consideration; and if that is to prove successful in the manufacture of sugar, as well as molasses, we can have little doubt, the devotion of arable, or grazing lands even, to the maple, will be less frequently practiced. We have not yet seen any fair calculation of the cost of growing and making maple sugar, taking into account the value of the land, the interest annually thereon, the expense of gathering and boiling the sap, with the price of the article in market, etc., as in other farm productions, which, if we had them, would lead us to form a reliable opinion. These we should be glad to receive from some practical and experienced men who have been long conversant with maple-sugar-making. This is an economical question, and as such should be examined. We ought, perhaps, in candor to say that maple sugar, from being usually considered a *luxury*, bears about twenty per cent higher price in market than other sugars, irrespective of *real* worth.



Cook's Portable Sugar Evaporator.

Though, since the experiments of the first two years, we have not had great faith in the idea that the Chinese Sugar Cane would be a profitable sugar crop for *general* cultivation in the northern States, yet we have constantly advised that it is adapted to the production of sweetening (syrup at least), in remote sections of the country, where southern or foreign cane sugar is not accessible without great cost for transportation. To this opinion we still adhere, and every now and then there are indications that even in sections not so remote from markets, sugar may yet be produced profitably. We have before us some very fair samples of sugar said to have been made in considerable quantities in Ohio, last year, by the use of Cook's Evaporator, of which we present an engraving and description herewith.

Our own experiments in 1857, and those we have seen made by others, all go to show that to obtain good syrup a very brisk evaporation of the juice is required. In slow boiling the juice sours, which renders the syrup poor, and of course unfits it for crystalizing into sugar. The design of Cook's Evaporator is to secure this end, and so far as we can judge from the drawings of the implement it seems well adapted to the purpose. We regret not to be able to speak from personal observation and examination.

Description.—The evaporating pan, *C, C*, is from 6 to 10 feet long, and from 3 to 4 feet wide. It is made of tinned copper, or galvanized iron, or other protected metal, the bottom being crimped into flanges or folds, so as to expose a greater surface to the fire. The folds are also so arranged that a continuous channel is formed in the bottom, through which the fluid poured into one end of a groove at the left, flows along to the other end, then across into the next groove and back through it, then across into the next groove, and so on until it runs off into the tub, *F*. The fire is placed in a sheet iron furnace, *B, B*, at the left, where the door is shown; the heated air passes along under the pan and out through the smoke-pipe, *D*. The greatest heat is applied where the fresh juice is received from the tank, *E*, and the heat is of course gradually diminished towards the right, where the juice is more concentrated.

The pan is placed upon a frame resting upon the rockers, *A, A*. By this arrangement the pan can be inclined so as to give the liquid a greater, or less rapid flow, according to the degree of heat and rapidity of evaporation.

Operation.—As soon as possible after expressing the juice from the cane it is slowly fed through a regulating faucet, from the vat, *E*. It flows along over the fire from groove to groove, as above described, being skimmed as it passes along, and, if the stream be properly regulated, by the time it reaches the discharge pipe it will be sufficiently reduced for syrup or for granulation.

We suppose the upturned flanges must be protected from contact with the fire underneath, otherwise they would burn the syrup at the upper line where it came in contact with the portion of metal uncovered by the fluid. We have found that in boiling the sugar cane juice, as well as in condensing other syrupy fluids, the burning is usually done by portions of the fluid coming in contact with the kettle or boiler where it is not kept cool by being covered with the fluid.

The price of these Evaporators varies from $35 to $70, according to the size. It is claimed by the manufacturers that the $40 size will boil two barrels of cane juice per hour.

Cut Grain and Grass before Ripening.

An intelligent practical man who had just read our article on this subject in Vol. XV, page 253, remarked in our hearing that "if the reasoning of that article be correct it would be worth millions of dollars to the country every year, should the mass of farmers study it and act upon its suggestions." Now we know the reasoning was correct, not only because founded on true scientific principles, but also because we have abundant confirmation in the united experience of all who have put the matter to practical test. We will here repeat that all grass and grain crops designed to be used as food for man or beast should be gathered before full maturity.

Grass, while still green, contains a large amount of starch, gum, and sugar. The sugar is perceived in the sweetish taste of the juice; the starch and gum, being nearly tasteless, are not so readily perceived. The principal nourishing ingredients in all kinds of food are starch, gum, sugar, and some nitrogenous compound. But

the starch, gum, and sugar, are mainly changed into hard indigestible woody fibre when grass fully matures. If the ripening process be arrested eight or ten days before its completion, and the plant be dried rapidly, double or treble the amount of starch, gum, and sugar will be secured. The same reasoning holds true of all kinds of grain. Every one is familiar with the sweet taste of green corn, wheat in the milk, etc. When the growth is completed, cut these crops and you save a considerable amount of rich nutriment which would otherwise be changed to the woody fibre of the outer shell. The only point to be looked to, is, to wait until the accumulation of juices is completed, and then begin the harvesting at once. The only exception to this rule is with crops designed solely for seed; these may well be left to the natural full ripening upon the stalk, especially when the seed is to be kept long.

The proper time for cutting grasses is at the moment the seed is set, or immediately after the flowering is over. Clover should be cut as soon as in full bloom.

A large number of experiments on wheat and other grains indicates that the proper time for harvesting is when the kernel is fully formed, but still soft enough to yield to a moderate pressure between the thumb nails. This is usually about ten days before full maturity. We have had reports of a number of definite experiments on this subject, since our former article, one of which is given below. Several years ago Mr. Hannam, of Yorkshire, England, made five successive cuttings from the same field of wheat, and carefully noted the results which are given condensed in the following table:

Cuttings.	Days before maturity.	Products of 100 lbs of Grain.		
		Fine Flour.	Seconds	Bran.
1	30 days.	75 lbs.	7 lbs.	17 lbs.
2	21 days.	76 lbs.	7 lbs.	16 lbs.
3	14 days.	80 lbs.	5 lbs.	13 lbs.
4	2 days.	77 lbs.	7 lbs.	14 lbs.
5	0 days.	72 lbs.	11 lbs.	15 lbs.

The largest yield, and the finest flour was obtained from cutting No. 3. A subscriber of the *Agriculturist* in Ottawa, Ill., writes that after re-reading our article above alluded to, he last Summer resolved to put it to the test on his wheat crop of fifty acres, although against the protest of his well-meaning neighbors. For comparison he left a small portion standing in the field until fully ripe. The result he states as follows:

"The bulk of the crop cut first, weighed 62½ pounds to the measured bushel! The remainder of the crop, cut when fully ripe, weighed but 58 lbs. per bushel—a difference of 4½ lbs. per bushel. The amount harvested was 1,200 bushels; thus a gain of 5,400 lbs. weight, equivalent to about 90 bushels in bulk, was realized. The flour made from the early cut wheat was superior, being white and lively."

Let others who have not full faith in this reasoning, try a small portion of wheat or other grain by cutting it when just out of the milk, and carefully note the results; we feel quite sure they will be satisfactory. The reaping machines, now so common, put it in the power of farmers to gather their grain crops at the most appropriate season.

To Prevent the Feet from Slipping in Haying Time, etc.—C. T., Queens Co., N. Y., recommends tacking the soles of old rubber shoes on the bottoms of boots or shoes during the haying season, to prevent the feet slipping. Leather becomes very smooth by walking over stubble, and the mower sometimes finds it difficult to "get a good hold" as he advances forward to swing his scythe. It is also a good precaution to put on rubber shoes with corrugated bottoms when going on to a sloping roof, as there is less danger of slipping—unless the roof is very wet, when one should not go at all.

Agricultural "Fairs" and Exhibitions.

The Exhibitions held under the direction of State, County or other Agricultural associations, though often called "fairs," are improperly designated by that term. A *fair*, Webster well defines as "a stated meeting of buyers and sellers for trade." Although business transactions are often effected at our annual agricultural gatherings, this is only incidental, and not the primary object for which they were established. Fairs are of very ancient date in European countries. They originated in sparsely settled districts where on account of distance from any emporium it was difficult to obtain necessary annual supplies, or to find a market for the various products of industry. Becoming established, they have been kept up even after the settlement of commercial towns within easy reach, partly because of "custom," but particularly, no doubt, because such gatherings are usually made the occasion of merry making and sight seeing, where the rustics find much pleasure, and the entertainers much profit. These fairs differ in their character; some being general, for the sale of articles of every description, others confined principally to some one species of articles, as farm stock, horses, dairy products, etc. In France a *hair* fair is held annually, to which the young maidens flock by hundreds to dispose of the crop of tresses they have cultivated for the year.

In this country few institutions of the kind have existed, except the fancy fairs usually connected with ladies sewing societies, of which we, and no doubt many of our readers have lively *purse*-onal recollections. Recently, however, there has been considerable discussion as to the feasibility of holding agricultural fairs, or of adding a department to our exhibitions, to be devoted especially to this purpose. We think the latter proposition decidedly objectionable. There is already too great a departure from the objects for which such exhibitions should be held. Instead of being the means of bringing into notice the results of improved culture, thereby leading others to adopt the methods by which the fine specimens of produce and stock exhibited, have been obtained, too many of our annual gatherings have degenerated into mere shows for amusement and to gratify sight-seeing curiosity. In some instances circus-managers have shared profits with county associations, and in numerous cases the race-track with its men and women performers has been the chief attraction. In the selection of speakers also, we have known greater regard paid to affording some political aspirant an opportunity to display his parts and make capital by much fair speech, than to imparting new ideas in the science of cultivation, by men competent to instruct and interest. The addition of a "fair" department to exhibitions would still further detract from their usefulness. A man with a flock of sheep to sell, or who should wish to purchase a horse, would naturally have his whole thoughts upon this, and trafficking and bargain hunting would be the great business of the day.

Of the institution of agricultural fairs distinct from exhibitions, where the avowed object is to buy and sell, we think favorably. The time consumed in looking for stock needed on the farm, or for arranging the sales of the home produce is no small item, when a day is often worth many dollars in farming operations. Many fields are unplowed because the owner, driven with business, had not time to look up cattle in the Spring; many acres of grass go to waste for want of readily accessible stock to feed them off. Often too, men sell at a sacrifice rather than wait for the next chance customer to call for their produce. Again, in the rapid fluctuations of prices which often occur, it is impracticable for the man distant from sources of information to know what valuation to put upon his stock. Merchants and speculators have their telegraphic "feelers" out all over the country, and are speedily apprised of the slightest change. But the newspaper reports by which many farmers are guided, are often several days old when they are read, and are by no means reliable. Many of these difficulties could, we think, be obviated by properly conducted fairs. Purchasers would be attracted by finding an assortment from which to select, and owners having arranged the home business with reference to the time appointed, could more easily attend to disposing of their stock. In such a gathering there would soon be a well understood scale of prices, and much unnecessary higgling and chaffering be saved.

As an affair of so much importance should be under some responsible management, it might be well to initiate the enterprise under the superintendence of the County Agricultural Associations already formed; the regulations would vary with localities. The experiment has already been tried in a few places, and so far as we have heard, participants generally are well pleased with the results. We shall be gratified to hear of the further succes of the movement, as whatever simplifies the exchange of products is a gain to both producer and consumer: there are under the present system too many "middle men," whose profits add nothing to the general value.

Officers of N. Y. State Agr. Society.—In response to several enquiries for the officers of this Society for 1859, we give the following list.

President—Hon. A. B. Conger, of Rockland.
Vice-Presidents—1st Dist., Edward G. Faile, of N. Y. 2d, C. S. Wainright, Dutchess; 3d, Dr H. Wendell Albany; 4th, Henry M. Beckwith, Washington; 5th Benj. N. Huntington, Oneida; 6th, S. A. Law, Delaware; 7th, Jas. O. Sheldon, Ontario; 8th, T. C. Peters, Genesee
Corresponding Secretary—Benj. P. Johnson.
Recording Secretary—Erastus Corning, Jr.
Treasurer—Luther A. Tucker.
The *Executive Committee* consist of the above together with the following: Edward A. Lawrence, Queens; T. B. Carroll, Rensselaer; H. W. Dwight, Cayuga; Chauncy Boughton, Saratoga; Alrich Hubbell, Oneida.

All communications and enquiries should be addressed to the corresponding Secretary, Col. B. P. Johnson, at Albany. The next annual exhibition will be held at Albany.

Hog Cholera.

To the Editor of the American Agriculturist:

Much has been said in the *Agriculturist* at different times with regard to the disease called Hog Cholera, which should be called, stoppage of the issues. There is on the inside of the fore-leg of every hog, opposite the knee joint, three small ducts or pipes which connect directly with the lungs of the animal. In every healthy hog, there is a continual discharge from them, of a thick offensive matter, causing the hair to look greasy around them. Now if those issues get stopped as they often do, the hog will die in a short time unless they are opened, which is done by inserting a wire about the size of a knitting-needle into the issues from ten to twelve inches, being careful not to punch through the membranous lining. After the opening process, anoint the inside of the leg with salt grease, and rub with a cob until the skin looks very red, and in nine cases out of ten, if done in season the cure is effected.

The first symptoms of this disease are loss of

appetite, lameness in the limbs attended with a cough, as the lungs are the seat of the disease, and after death are covered with black spots. Hogs that are confined in small pens, or a large number together, are most liable to the disease. I have never known an instance of it where hogs had plenty of room, and free access to a brook or river of clear running water. WILLIAM LEE.

Fairfield Co., Ct.

On Raising Pork and its Use as Food.

We have a lengthy essay on this subject from Mr. J. W. Redfield, but have not room to give it entire, and therefore present an epitome:

The opinion is expressed that hogs are generally diseased; not acutely, but subject to chronic disorders which are only ended by the knife of the butcher. Tuberculated and ulcerated livers and lungs, and congested and enlarged lymphatic glands are found in the semi-wild hogs which fatten in the forests of the West and South, as well as in those which are confined in a space just large enough to eat, stand, and sleep in, and compelled to breathe the exhalations of concentrated manures which it is their business to compost and manufacture. The hog is naturally of scrofulous constitution, and his diseased meat being eaten, is brought into close contact and intimate conjunction with fluids and solids of the human body, and thus imparts scrofula, showing itself in obstructions, indurations, enlargements, tumors, tubercles, eruptions, ulcers and cancers.

Mr. Redfield, thinks the tendency of the swine to scrofula may be accounted for thus: Life in warm-blooded animals is sustained by a supply of heat-producing material taken as food, such as oil, lard, fat, or its equivalent in various forms. When more such food is taken than is necessary to supply the immediate wants of the system, the surplus is stored in the cellular membrane in different parts of the body, ready to be used when needed to make up any deficiency of food. The fat, thus deposited, in time becomes rancid, and is then absorbed into the circulation to make room for fresh deposites, and if there is already supplied to the lungs a sufficient amount of matter through the food to keep up the necessary combustion, this fatty substance remains in the blood unpurified, and gives rise to scrofulous disease in various forms. The hog is particularly liable to this difficulty, because his food is mostly starchy, saccharine, and oily, rather than nitrogenous; fat-making rather than flesh-making. Again, his habits and mode of life tend to impede the vigorous exercise of the lungs whose office it is to purify the blood. He lives frequently in a very impure atmosphere, and also by almost continual rooting, excludes a free supply of air from the lungs. His filthy habits also impede the egress of offensive secretions from the skin, and increase a tendency to lymphatic and phlegmatic diseases.

Mr. R. thinks that these peculiarities of swine were intended to subserve the purpose of rapid propagation of the species; for which swine are remarkable. During the process of gestation and nursing, the excess of food goes for the growth of the young, instead of being deposited in the form of fat, thus preventing the difficulties already referred to. He says it has been observed that scrofulous and consumptive persons enjoy apparently improved health during pregnancy from this fact. Hence he concludes that the proper way to prevent the supposed deleterious effects of eating pork, is to kill the young porkers for the table before they arrive at the age when their food adds to their fat instead of increasing the general growth. He thinks the superabundant food of one sow, in the shape of eight or ten pigs, is greater in quantity and better in quality, than in the form of that one sow fatted and overgrown; and hence more profitable.

He advises to commence with one sow of the finest breed, pregnant with her first litter, which will be at the time of the commencement of excessive nutrition; to save all the sow pigs and one boar for breeders, and to make roasters of the rest, before the males are old enough to have a rank taste, thus avoiding castration; and to continue thus, until the herd is sufficiently large.

In conclusion Mr. R., after adverting to the superiority of young porkers to the overgrown animals in an artistic point of view, (the little fellows being not without a certain style of beauty) concludes with the opinion, that the large fattened animal is fit only for stearine candles and lard oil, and that it is the little pig, free from disease, fat, fair, rich, tender, and delicate, that is fit to be eaten.

Tim Bunker on Raising Boys.

MR. EDITOR.

As I was going down by the Horse-Pond lot, this morning, the same one that I drained last year, I found Seth Twiggs' horse. Jotham Sparrowgrass' cows, and Deacon Smith's flock of sheep turned into my corn and oats. It looked as if they had been in the better part of the night; for the corn was pretty much all nipped off, or torn up by the roots, and the oats were badly trampled. The corn crop is of course ruined as it is now too late to plant over. It so happened that I had fixed one of the gate posts yesterday and the dirt was all nicely smoothed off, and the enemy who had done this had left his foot prints by the gate way. I took the measure of the shoe print, and walked straight up to Jake Frink's and inquired for his oldest boy Kier, a young fellow about eighteen, who is up to all manner of monkey shines, and has got a terrible bad name in Hookertown. Kier was called in, and it was found that the measure exactly fitted the shoes in which he stood, length and breadth of top and heel.

Jake Frink was a good deal astonished, when he see that his boy was caught in such an unneighborly trick, but I don't know why he need to be, for he has had no sort of control over his boys, and always let them choose their own company, and pursuits. Kier, has got a notion of drinking the last few years, staying all night at the tavern, driving fast horses, unhinging gates, girdling young fruit trees, firing stacks, and turning cattle into corn fields. He seems to think it is very smart, to destroy property in this way, and to make himself a nuisance in the neighborhood generally. He is caught now, and must walk up to the captain's office and settle. The next worst thing to a bad father, is a bad public opinion that submits to vice and rowdyism. I am Justice of the Peace, and if I was not, I am a neighbor to Jake Frink, and bound to help him keep his boys in their place. I have a very poor opinion of that rural cowardice, which gives up a civilized community to the depredations of a set of young Arabs, like Kier Frink. What is the use of having law, if you do not enforce it against the destroyers of property, and the disturbers of the peace? If the young chaps want to cut up, and have music, it is fair that they should pay the fiddler. If they rob hen roosts, the hens should not be left to do all the squawking. It will do them good to look out of a roost, with iron grates to the windows.

Now I hold, that a man is a poor farmer, as well as a bad citizen, that raises such a boy as Kier Frink. The farm exists for the sake of the family that works it, and *its chief end is to make smart, useful men and women.* Your great crops, and fine stock all go for nothing, unless you get the blossom of the farm—man. What is an apple tree good for, unless it raises apples? The shade is no better than that of any other tree, and the fire-wood does not amount to much. So the farm is not worth much, unless it blossoms out into good nice housewives and useful upright men.

It is a good deal of a knack to raise a first rate cow or steer, even after they are born right. There is many a full blood heifer, with first-rate milking qualities, spoiled by bad treatment. Keep her on bog hay Winters, and let her run in the road Summers, and I guess, she would never amount to much. And you might have high grade Devons, with all the elements of splendid working cattle in them, that would bring three hundred dollars a yoke, and treat them so when they were calves and yearlings, that they would not bring a hundred. You might dwarf them or lame them, or injure their horns, or make them ugly and breachy by bad handling. An ox known to jump fences, or kick, or gore cattle, is very much depreciated in value.

It is just so with the human stock, brought up on a farm. Almost every thing depends upon the bringing up—a great deal more than it does with the brutes, for the animal nature of man is only a small part of him, and his moral nature and habits are almost entirely shaped by those who have the care of him, while he is young. If this gets the right start, I have always noticed that it generally brings every thing else along right, with it. If a fruit tree gets to bearing when it is young, all the forces of the tree will run to fruit, and you will not be troubled with too much wood and foliage. And if a boy blossoms out into the virtues of industry, truthfulness, honesty, temperance, and purity, I think it is pretty certain, we shall have that kind of fruit, as long as he lives.

Now to get this fruit early, we must prune both root and branch. The shoots that are running to wood, must be shortened in, and a spade must sometimes be thrust down upon the roots, and cut them off. This seems harsh treatment, but every fruit grower knows that it is necessary. So we must shorten in the boys, when they run wild, nip off the blossom buds of vice, lying, stealing, swearing, drunkenness, and such like. There is an old article they used to do such things with, when I was a boy—called Solomon's rod. The bark was very bitter, but wholesome, and it worked like a charm. I am afraid folks do not use it so much as they used to. At any rate Jake Frink has never used it at all. He was always scolding about the cruelty of whipping children, and if one of his ever got a little of the oil of birch in school, he was always ready to find fault with the teacher, and take the child's part. The youngsters very soon came to believe, that their father had rather have them lie, and make disturbance, than to speak the truth, and behave well. His mode of bringing up boys has turned out upon society, that promising lad, Kier Frink, a vagabond and loafer, at the age of eighteen! Solomon's rod, with steel at the end of it, was never half so cruel as the misplaced indulgence of his father. What sorrows are before the poor old man with such thorns in his pillow. I am glad to see, that you keep up your chats with the boys and girls. Keep them straight a few years longer, and we shall have a generation of farmers worth looking at.

Yours to command,

TIMOTHY BUNKER, ESQ.

Hookertown, June 13, 1850.

THE COTTAGE DOOR—From a Painting by J. Clark.

(*Engraved for the American Agriculturist.*)

Need a line of explanation be appended to this picture? Does it not 'speak for itself!' Do we not seem to stand at the cottage door of a hard-working countryman, who is enjoying his nooning hour, smoking his pipe and reading his weekly paper, surrounded by his hale and happy family? A more graceful position of the laborer might have been chosen, as an ideal, and the pipe, too, might have been omitted—but the picture would have been less natural—less truthful. This man is happy, and he exhibits his pleasure in his most natural way; he is proud of that 'blessed baby' which chuckles with delight as the familiar pipe tickles its fat chin. The mother, too, looks down with smiling joy upon the crowing infant. Our sympathies are enlisted with the other little one, who for the moment feels herself neglected; but her turn will soon come, and she will romp as blithely as ever upon papa's knee. We like pictures of this kind; they tell of love, peace, and happiness in rural, in lowly life, where, if anywhere, happiness is to be found. There is a growing taste among artists for pictures of the every-day walks of life. We like to see this, and will cheerfully do our part to scatter them widely; for while we mean not to be behind any, in furnishing the *practical* information which such a journal should give—there is another and wider aim also kept in view, viz: to add to the innocent pleasures of the household, so that all its members shall be interested, and benefited morally. Pictures that appeal to the feelings soften the heart, and then leave a lasting impression.

Standard of Excellence in Grapes.

In these times, when one is continually hearing of "new and superior" grapes, it is well to inquire what a really excellent grape is. Mr. Jones offers for sale a seedling which he declares is "superb, unsurpassable, a great acquisition;" and Mr. Smith advertises another which he declares is "hardy, sweet, luscious, superior to all others;" and so on through the catalogue of excellences. Now, what do those words mean? If, in our bewilderment, we buy and plant everything that is recommended, we shall get our grounds full of new sorts, each one, of course, like the last-born baby, supposed to be better than the preceding, but often proving in the end to be rather otherwise. Witness here, the "Charter Oaks" bought by many a gardener in his simplicity. What, then, is the standard to judge a new grape by?

1. One point to consider, is *hardiness*. It matters not that a grape is as delicious as the best hot-house varieties, if it is not hardy, and does not ripen its fruit well in the climate where it is to be planted, it is of comparatively little value to the public. Amateurs, by burying the canes in Winter, and by enclosing the tops in glass frames in Autumn, and by other nursing, may get something out of it, but for people generally it is worthless. It has often been supposed that a foreign grape could not be hardy in this climate. But, as it has been well shown by the Gardener's Monthly, "whenever the foreign grape does not *mildew*, it is perfectly hardy." The canes can not ripen well, if the foliage drops off prematurely, whether from mildew or any other cause; and if they do not ripen, they can not endure the frosts of Winter. But all foreign grapes do not mildew. The Black Hamburgh, when trained on brick walls in Philadelphia, is generally untouched by this blight, and when so, matures its wood and ripens its fruit. It is said, moreover, that the *Brinklé* and *Clara*, both with foreign blood in their veins, seldom mildew, and when they do not, they ripen their wood well.

The simple question, then, is as to the actual hardiness of a vine, let its origin be what it may. If it can endure our Winters as well as the Isabella, Concord and Delaware, it is one point of great excellence.

2. *Fertility.*—If a vine has the constitution of an oak, yet bears only a few clusters, or a few berries on a cluster, it must be pronounced wanting. And if to this, it be added that the berries ripen unequally, or drop from the vine at a touch, it is also a great defect. Some of the much-lauded novelties fail here.

3. *Superior Flavor.*—This is the crowning excellence. Our forests are full of wild grapes in large variety; and those persons who like them and the Charter Oaks, and Northern Muscadines, because their musky odor can be smelt a long distance, can be easily satisfied. But there are certain fastidious people who want something better or at least something else, and they must be gratified. They are not partial to acids, or astringents, or hard pulp in grapes, and their whims must be indulged. Give them a new grape that is sweet, or slightly brisk and sprightly, tender, juicy, and melting, and their eyes will swim with satisfaction, they will heartily thank you, and pay you a fair price for it.

The above remarks suggest, in few words, the true standard by which the new grape should be tried. And as every man can not for himself test each new candidate, let him inquire whether the committees of our State and National Pomological Societies recommend them on these grounds. These committees at least ought to be composed of capable, judicious, and reliable men; and if so, their opinion is worth more than that of any individual who may be pecuniarily interested in the sale of his new plants.

Summer Pruning the Grape Vine.

When vines are properly pruned in the Fall or Winter, they will need only moderate pruning in Summer. The first item in this work is rubbing off all superfluous shoots before they have attained to much size. Where several push out at a single joint, all but one, or at most two, should be rubbed off. Again, after the fruit has set, if there are more than two bunches on a single spur, they should be pinched out. One good, heavy bunch is often enough for a spur, and certainly two are all it should ever be allowed to carry. Another item is pinching off the ends of the bearing shoots as soon as the berries are half grown. Pinch off at two or three buds beyond the last cluster; never nearer than this. In a week or ten days afterwards, the ends of these shoots will have pushed several inches more: pinch off this new growth, leaving one leaf at the base of it, so as not to cause buds to break out prematurely lower down on the spur. Continue this operation every week until the fruit is full grown and begins to color well; then let them go.

Summer pruning *does not* consist in pulling off *the leaves* of the vine. Many persons still continue this barbarous practice. But they should consider that the leaves are the lungs and stomach of the vine, and are as essential to its vigor and health as the same organs well cared for, are to man. The leaves are particularly necessary in the latter part of Summer, not only to finish the growth of the berries, but also to elaborate the juices on which the fine flavor of good grapes so much depends. Give the leaves all possible sunlight, but do not tear them off in order to expose the fruit.

Look after the Grape Vine Worms.

For a few years past the grape vine has suffered much from an insect called the Gartered or Grape-Vine Plume (*Pterophorus periscelidactylus*). This is a small greenish caterpillar, or bristled worm, half-an-inch in length, which first hatches out early in June from an egg laid upon the leaf by a small moth of tawny-yellow color. The caterpillar almost as soon as hatched commences feeding upon the leaf into a coil and thus forms a house for its residence, which it soon destroys however, by eating away the sides. The leaves thus attacked are very readily discovered from their curled shape and faded appearance. After partially destroying its first habitation it attacks other leaves. When its growth is completed, the insect spins its cocoon, and later in the season comes out a moth, to lay a new crop of eggs which produce another generation of worms in July or August. These again deposite eggs for the following season.

The destruction of the leaves is often very rapid, and the vines look as if struck with blight. In the absence of leaves, the grapes must mature very imperfectly of course. The fruit itself is often eaten by the caterpillars.

The ravages of this pest can be very much lessened, and nearly prevented in the future, by spending a little time twice a week in picking off the leaves which are attacked and burning them. This not only stops the further ravages of the worms already hatched, but also intercepts the laying of eggs for another brood. During the past month we have succeeded in nearly ridding our own vines. Several specimens of the insects have been sent and brought to our office, by persons who say they must despair of raising grapes any longer, and rather than have plants to nurture an army of such marauders, they contemplate rooting out their vines. To such we say spend a little time as recommended above, beginning before the vines have become overrun with them, and continuing the examination as long as any insects can be found. Where vines have been neglected until now, commence upon them at once, even if the insects have already done the mischief for this season. A few minutes work upon each vine will destroy the eggs which would otherwise hatch out an army of worms hereafter.

The birds here exhibit another instance of their usefulness to man. While examining our own vines the other morning, we were quite interested in watching the operations of a wren as he darted among the foliage peering above and below the surface of the leaves. We soon discovered that he was materially assisting our labors, for his keen eye and sharp bill found and nabbed the caterpillars much more rapidly than we could do so. So far the principle complaints we have heard have come from the residents of cities and villages, rather than from the country. This may be, in part, owing to the easier diffusion of the insects from one location to another near by, but probably the less number of birds in such places is the main cause of the more rapid increase of the insects. Two or three wren-houses near the vines will be the best remedy we can prescribe in addition to the hand-picking.

How to Cure Fruit Stealers.

One great hindrance to fruit growing, in the neighborhood of towns, and one of the greatest annoyances to those who persevere in its culture, is its exposure to being stolen. One may send to a distant nursery for a rare and expensive kind of fruit, may watch over and nurse it for several years, and then when his eyes are gladdened by its first productions, some ragged loafer may enter his grounds by night and devour them. Nay, some loafers *not ragged*, but professedly genteel, may rob him of his treasures, and then chuckle over their success as a first-rate joke!

Why should not our legislators give us a law punishing fruit-robbing with heavy penalties? Better that a thief enter our barns and carry off oats or corn, than enter our garden and strip our pear-trees and grape-vines of their delicious burdens. We wish, too, that public sentiment visited the robbery with greater reprobation and disgrace. But until such a good time comes, every man must guard his own castle in the best way he can. A neighbor of ours treats his pilfering visitors to a dose they don't relish. For example: When his Early Sweet Bough apples are being nightly stolen, he takes several fine specimens and immerses them in a weak solution of ipecacuanha, and scatters them again on the ground; first marking them so that his own family shall not eat them by mistake. He treats a few of the outside hills of his strawberry patch in the same way. It affords him no little amusement to learn, privately, that the doses take effect where they were designed to do so, his father, (a doctor,) being soon sent for by suspected persons to prescribe for their disordered stomachs and unaccountable nausea! This gentleman's fruit garden lies on the bank of a canal, and the *indigestibility* of his fruits is well known to the canal-drivers all along that route!

Last Summer, a very intimate friend had his

first crop of grapes from some choice vines. Before fully ripe they began to disappear. As they were in a place not likely to be visited by outsiders, he suspected the domestics in his own house (a not uncommon source of fruit thefts, elsewhere, we presume). So putting on a very offended air, he walked through the kitchen, bitterly complaining of the thieves. The cook said she had seen the birds picking the grapes, and she guessed they were the marauders. "Very well," said he, "I shall fix them, or whoever else takes the fruit. I have some bi-tartrate of antimony (tartar-emetic) in the house, and if I sprinkle a little of that on some of the fruit it'll be the last that any one will steal. Get me some flour to mix it with." He took the flour into another room for a few minutes, as if for preparing it, and then scattered some of the simple flour in sundry places on the vines, and upon other fruits in the garden. There was little further disappearance of fruit during the Summer. However, a few mornings after, he chanced to leave the breakfast table just after beginning to eat, and going to a rear window, he saw the aforesaid cook carefully examine the vines, and then pick three nice bunches from the outside of the arbor, near the ground, where no flour had been applied. These she quickly wrapped in her apron and retired to an out building to eat them. When questioned afterwards, "she had niver tasted a grape." *Moral.*—Don't always attribute the loss of fruit to the "boys."

And here, we are reminded of a method practiced some years ago by a down-easter, and of which a correspondent gave an account in a former volume of this journal. It is worth rebeating. "A tall, green-looking Yankee accosted me at a County Fair, having a fine-looking apple in his hand, and begged me to tell its name, if I could. I tasted it—but, shade of Pomona! of all the sour apples I ever ate, this capped the climax. It was worse than verjuice, or sour plums, or unripe persimmons. After I had regained my composure, I ventured to ask what might be *his* name for this invaluable fruit. Whereupon, with a sort of satirical smile stealing over his otherwise sober features, he replied: "Wal neow, stranger, that's the most useful apple on my hull farm. I call it the Yankee apple, 'cause it can't be beat: it looks so good, and yet is so 'tarnal sour, that I use it only to graff on all the lower limbs of my apple-trees standing near the road. The upper limbs I put to Greenings, Swaars, and such like good apples. Neow, the boys seein sich good lookin apples handy, jump the fence, seize the fust fair one they can reach, take one bite, —— but, I swow, after one bite, they never wait to take another, but run right off as fast as legs can carry them, to Deacon Simmons' orchard, to get one of his good Baldwins to take the seour taste out of their mouths. My orchard sartainly has a 'orful reputation with the risin generation, and so I save my fruit. Now, if this ere is not a very useful apple, I'd like to know what is?"

We adopt the suggestion of our old correspondent, and recommend that the Yankee apple be put on the list of approved fruits, at the next meeting of the Pomological Congress, as an apple "worthy of general cultivation."

AN EXTRA PUFF FOR BALTIMORE.—Parson Brownlow is reported to have said: "If we were denied the privilege of going to Heaven after death, our next and last request is, that we may be allowed to go to Baltimore."—A cotemporary, however, adds that "Baltimore is a fitting place of abode for those spirits against whom the gates of Heaven have been closed. Of course we shall know where to look for Brownlow after 'he shuffles off this mortal coil.'"

Look after the Borers

The perfect winged insects of both the apple borer (*Saperda bivitata*) and the peach borer (*Œgeria exitiosa*) are now busy at work among the trees, providing for their future progeny. Selecting the night season as best fitted for works of darkness, they flutter about the trunks of both peach and apple trees and deposite tiny eggs upon the bark close to the ground. If grass or weeds grow about the trees so much the better for them, as they seem instinctively to think that their eggs are more secure when partially screened. In this they are not amiss, as the young insects have a better chance to escape the keen eyes of birds than when fully exposed; hence clean tillage and friendly birds check their increase.

They usually select trees of three to six inches in diameter, and on this account a young orchard requires more care than trees of long standing.

Examine the trees now, and if any sawdust like borings are seen upon the ground, search for the hole from which they have fallen, and either cut away with the point of the knife until the worm is found, or thrust a whalebone probe in and punch his ribs. Having killed the insect and put clay or grafting cement over the wound, wash the whole trunk of the tree with a pretty strong solution of potash and water to destroy any eggs upon it. This is the essential point now, as it is likely that the female has laid all her eggs and if destroyed, the future generation is cut off. Any alkaline solution will readily destroy the eggs. Potash, soda, or even soft soap may be used.

There is another purpose served at the same time, viz.; destroying the bark scale which has just hatched out. If this practice is followed up every season during the latter part of June, or early in July, there will be little danger from either scale or borers, and the trees will have a dark green and healthy bark upon which no moss will be found. If borers have been very troublesome, it may be well to examine the crowns of the trees in September or October, and cut or bore out any insects which have escaped destruction now.

"Tyler's Tree Permeating Powder"—Is it a Humbug?

CALOMEL $11.38 A POUND!—"SALIVATING" INSECTS.

After our June number had gone to press we received from Mr. Thos. K. Fluke, of Scott Co., Iowa, an attractive circular, issued from New-York city, with a note from Mr. F., stating that such circulars are to be found in almost every family in the West, and inquiring whether it is a humbug or not. The circular offers dollar packages of a powder which "will save Thirty Trees." It prescribes "Tyler's Tree Permeating Powders," "for the protection of fruit, forest and shade trees, "shrubbery of all kinds, field and garden seeds, "plants and vegetables of every description, from "worms, bugs, flies and insects that are known to "infest almost every orchard, field, garden, &c., "throughout the land." It goes on to direct, to put a little of the powder ("one or two parcels of the size of a small green pea,") under the bark of trees through an incision; and to soak field seeds in a solution of one table-spoonful of Powder to one gallon of water. [*Query.*—Will the powder dissolve in water at all? *Calomel* does not.]

Among other things in the circular we read: "One very important advantage of the Powder is, that it keeps the fruit entirely free from those worms which have heretofore proved so destructive to Apples, Pears, Plums, Cherries, etc."

Well, well, here must be a splendid discovery! The fruit of thirty trees entirely freed from insects for $1! Why we would gladly have given more than one dollar a tree the present year could we have saved our cherry trees alone. Oh, Mr. Tyler, why did you send all your circulars away "out West!" Why did you not tell us here at home that you had such a boon for fruit-growers? Why did you not advertise it hereabouts and let us know where to find it? Fruit is not so plenty even here that we can afford to lose it.

But seriously, let us look into the plausible statements of the circular. 1st, Can any poisonous compound be infused into the sap of a tree in sufficient quantity to destroy insects without poisoning the tree itself? 2nd. If the sap of the fruit be impregnated sufficiently with the "Powder" so that the small quantity sucked out by an insect will prove destructive to animal life, will not the larger quantity eaten when the whole fruit is consumed, destroy human life? Beware, Mr. Tyler, or you may involve yourself in the charge of homicide! 3d. When seeds are planted they die and new plants are produced; how is it that soaking the old seeds renders the *new* plants poisonous to insects? But

WHAT IS THIS WONDERFUL POWDER?

Immediately on receipt of the circular and note of inquiry, we dispatched parties to the head quarters in this city, as announced in the circular. *They were found in the same room occupied at present by the "Agents" of the "Honey Blade Grass!"*

Having secured all information desired, and purchased some of the powder of the man responding to our inquiry for C. H. Tyler, we made sufficient examination to be convinced that it was probably simple calomel, or calomel mixed with common magnesia. A package costing us 50 cents, and labeled "sufficient quantity for 10 trees," was taken to a leading drug store, marked, opened and weighed. It contained ⅔ of an ounce avordupois, and 41 grains, or in all 205 grains. But the circular promises enough for 30 trees for $1, and Mr. Tyler offered us three packages for $1, or one for 50 cents. So we will estimate for 3 packages, or 615 grains for $1. As there are 7,000 grains in a pound avordupois, any one will see that this material, as put up by Mr. Tyler, *costs* ($11.38) *eleven dollars and thirty-eight cents per lb!*

Calomel is now wholesaled for seventy-five cents per lb! This is a handsome profit surely. But we may be cruel in thus complaining of the profits derived from so wonderful a discovery. If our fruit insects are to be wholly destroyed it would certainly be mean to try to rob the discoverer of the remedy, of any of his profits, however great.

While we think of it, we want to ask Mr. Tyler *how* the calomel operates upon the insects? Does it physic them, as it does "humans," until they are so weak that they can not cling fast to the trees but fall off and break their necks? Or is it sucked in with the juice in so small quantities that it "salivates" them, as it does children, and thus renders their mouths so sore that they can not bite the leaves or fruit? We are curious on this point. Please enlighten us Mr. Tyler, and the public; we will not charge you for the space you occupy.

But enough on this subject, We will only add, that wishing to be certain as to the composition of this wonderful Powder, we procured a package from head quarters, and forwarded it to Prof. Johnson at Yale College, for analysis, requesting him to mark the package, and retain a part for

future reference. We publish the reply as received.

YALE COLLEGE ANALYTICAL LABORATORY, New-Haven, Ct., June 3d, 1859.

ORANGE JUDD, Esq., Ed. *Am. Agriculturist:*

Dear Sir: Your letter of the 30th ult., enclosing a sample of "Tyler's Patent Tree Powders" was duly received. As you requested, I have submitted the Powders to a careful examination, and find they consist of *Calomel*, with a little lime, magnesia and soda, not more than may often occur in commercial Calomel.

The idea of destroying insects that prey on the foliage of trees, by infusing some poison into the sap, seems to have this very serious objection, that whatever will kill the insect, may kill or at least injure the tree itself, *or those who partake its fruits.*

Calomel is a substance so insoluble that if placed, as directed for the "Tree Powders," between the bark and wood of a tree, it is not to be anticipated that it could travel perceptibly into the circulation, so as to poison insects that feed on the foliage or bark.

SAMUEL W. JOHNSON.

Prune Fruit Trees Now.

Not excessive pruning, and indiscriminate cutting and slashing after the practice of the newly arrived Englishman, who was making openings "to let the *hair* in," but more or less pruning must needs be done, especially in orchards which have not received proper care in former years. If fruit trees are properly trained from the time they leave the nursery until they arrive at maturity, a common pruning knife will be the only implement needed, except in accidental splitting down of branches. But taking things as we find them—with the cross growth chafing the bark, a compact and too crowded head, limbs already beginning to decay—there are branches from three to four inches in diameter which must needs be removed, for the future best interests of the orchard.

To doctor such an orchard we would, during the latter part of July or early in August, take a light ladder, a narrow, fine toothed saw, a sharp pruning knife and a pot of shellac dissolved in alcohol with a paint brush in it, and commence operations. It is useless to attempt to make a full grown orchard, whose pruning has been neglected, look like the well formed, evenly balanced and short jointed trees which have yearly received a judicious cutting-out and shortening-in, from the time they were first planted. This is out of the question. In cases of doubtful expediency, we would give the tree the benefit of the doubt by leaving the branch, or in other words we would leave a somewhat thick top rather than make too many wounds to heal over.

Select a limb, saw it off *close to the body of the tree or larger branch*, being careful that its weight does not cause it to split down just before falling. Pare the wound smooth and coat with the shellac to keep out water and prevent sun-checking. When done during this month (July) the later growth of the season will commence to roll over the smooth cut and in a few years the new wood will unite upon the two sides and scarcely leave a scar. If an ax is used, leaving a stub of some six inches in length, the new growth fails to cover this cut; the stub begins to rot and let in water, which still further hastens decay even towards the heart of the tree.

Again there is no free sap now in the tree to be both lost and converted into a poisonous acid upon the trunk. The abundant foliage also protects the wounds which without shade or covering of some kind would crack in the sunshine.

We know that early Spring pruning has strong advocates, with many of the old school cultivators, some contending that their fathers and grandfathers pruned at that season, and consequently it must be the best time. Others ask why let the tree grow from May to July, and then throw away this very growth, and still others say July is a busy month, while we have plenty of time in February and March.

Answering the last first, we say, if you can not afford the needful time to attend to fruit trees, you can not expect success, and may as well give up fruit growing. Again it is not always found that the practices of our fore-fathers brought with them from an entirely different climate, are best suited to our wants, and they are gradually abandoned or changed. Let us also ask what is gained in point of growth by cutting off a limb in Spring and allowing the sap to escape, or let that same sap form wood which in turn is cut away? With small shoots of but one year's growth the time of pruning is not very essential. The old directions to "prune at any time when the tools are sharp," may answer for these. But on large limbs, give us July and August for pruning in this latitude.

Pot Culture of Roses.

Many persons who have no gardens, wish to have a collection of window-plants; and among these, they desire by all means to have a few roses. Others who have gardens, wish also to decorate their living-rooms in Winter with some of these floral charms. To such we offer a few words on the cultivation of roses in pots.

Small plants may be bought at the nurseries for a trifle; but where one wishes to avoid even this expense, they may be got in the following manner: Ask some generous Florist, or some rose-growing friend for a few cuttings of several desirable sorts, and "strike" them yourself. Get the cuttings in June or September, three or four inches long and with three buds. If possible, have a bud on the lower end of each cutting, and a leaf or two on the upper end. Insert them two inches or more in very sandy soil, shade them from the mid-day sun, and give them gentle sprinklings every evening. In three or four weeks, they will probably be rooted, and may be transplanted into separate pots. If extra care is given them, they will flower the first Winter.

The soil for potting roses is of great importance. A good mixture is, a compost of sand, turfy loam, and old manure, in equal proportion. If leaf-mold can be got, a little may well be added. Small pieces of charcoal may also be put in near the bottom of the pot; the roots delight to ramble among them. Every pot should be supplied with an inch and-a-half of drainage, made of small stones, pieces of broken crockery, or oyster shells. Plants intended for house culture should be kept in pots during the Summer. They would perhaps grow more luxuriantly if set out in the open ground, but in taking them up in the Fall, their roots would be so much injured that the plants would not bloom till about the following March. Keep them in pots the year round, sinking them in the ground during Summer, in some rather shaded situation so as to check their growth; re-pot them carefully in September, or add some fresh mold to the same pots, give them a good pruning, cutting out the weak shoots and shortening the strong, and set them for a few days in a cool aspect. Afterwards, they may have a sunnier spot, until frosty nights come on, when they should be taken under shelter. They will soon make new growth and exhibit flower-buds. These before long should be pinched back, so as to give the plants a vigorous, bushy habit, and a profusion of flowers during mid-winter.

We now suppose our plants to be in their Winter quarters, on a table or plant-stand near the window. The pots are washed clean, the bushes are neatly tied up to stakes, and every decayed leaf removed. They occupy one side of our living room, the air of which we know is too dry for their well-being; but we sprinkle their leaves every morning, and keep pans of wet sand covered with moss standing among them, hoping that the constant evaporation will keep them tolerably moist. Whenever the weather will permit, we open the window and give them a taste of fresh air which they undoubtedly relish. Insects infest them at times, but a little perseverance subdues them. We first tried the fumes of burning tobacco upon them, but this killed only a part, while it filled the house with offensive odors. Then we invited them to "take tea" with us the tea being tobacco-juice, and they left in disgust. And this is the entertainment we always give them when they come to our house. Or, to drop all figure, we make a pretty strong decoction, using the leaves found at tobacconists, take the plant infested and holding a cloth firmly over the top of the pot to keep the dirt from falling out, we plunge the foliage in the decoction and keep it there for a minute or two. This proves a settler to all the vermin. In the course of ten or fifteen minutes, we give the foliage a sprinkling of clean water. It is well occasionally to loosen up the soil in the pots with a small stick. Water should be given, just enough to keep the plants from flagging, increasing the quantity while they are growing vigorously and blooming freely.

The following will furnish a good list to select from. *Bourbons:* Souvenir de la Malmaison, flesh color, large and double; George Couvier, carmine, good form, and abundant bloomer; Hermosa, bright pink, cupped, always in flower. *Tea Roses:* Devoniensis, creamy white, and excellent; Gloire de Dijon, fawn color; Fragoletta, rosy blush; Niphetos, pure white; Eliza Sauvage, canary yellow. *Noisettes:* Solfaterre, sulphur yellow, globular; Fellenbergh, crimson, great bloomer; Lamarque, greenish white. *Chinas:* Aggripina, crimson; Madame Bosanquet, creamy blush, very beautiful.

For the American Agriculturist.

Dielytra or Diclytra?

NAMES OF PLANTS.

What a difference a small part of a letter will produce in a name. While this, now well known and truly superb plant, the diadem of the flower-bed, is in Europe called and written *Diclytra:* here it is known as the *Dielytra*, and it seems that at the first introduction of the plant into this country the *e* was read *e.* In some of the English catalogues it reads with *e* also, and if the plant was exported *from* England *to* the Continent, the mistake may be on the other side.

It is certainly an interesting question, which of the two is the *true* name of this most valuable flower? Authorities speak for Diclytra, etymology for Dielytra. The plant is the *Fumaria (amoena?)* of Linnée, the *Corydalis* spectabilis of Persoon, and the *Diclytra* spect of De Candolle, who in his *Prodromus*, enumerates several of the Corydalis under that name. Boppe, in his admirable and most complete work (German) on floriculture, has it as Corydalis, but gives the synonym, "*Diclytra.*" We can hardly doubt in such authorities. Yet, etymology finds nothing in Diclytra, while in Di-elytra it clearly sees a description of the form of the flower, as—in Greek—the name signifies: two-bladdered or two wing-cased; every flower has a double swelling.

Can any one of your readers give a decisive answer to the question—and thereby to the favorite flower its proper name? MIMOSUS.

P., N. H.

Design for a Rustic Summer House.

The violent contrast between the irregular yet graceful forms of trees and shrubbery, and the angular and precise finish of dwellings may be in some measure subdued by introducing into the house surroundings a rustic style of architecture, combining natural and artificial features. A Summer house may appropriately be of this character, particularly as the idea which should be prominent in a structure of this kind is that of unrestraint and inviting coolness, something out of doors and yet affording adequate shelter. The design above presented would be quite appropriate for some half-secluded nook in a large landscape garden, when it would add an attractive feature to the adjoining lawn. Something less pretending and elaborate would answer better for grounds embracing not more than two or three acres. The general style, however, might be preserved.

Rough, unbarked timber of fantastic shape is best for the construction of such buildings. Oak timber, although suitably gnarled is not sufficiently durable when exposed to the weather; it is checked by the sun, and the bark is easily loosened and peeled off. Yew, larch, birch and the common locust (*Robinia pseudacacia*), are the best woods for this purpose; the last named is almost indestructible, and its bark adheres very tenaciously. The monotony of color may be relieved by introducing ornamental work of apple tree limbs, stripped of their bark, dried, and well varnished. Wood work with the bark on may be varnished if desirable, by first washing with soap and water, and then, when dry, with boiled linseed oil. The oil should be applied in hot sunny weather. In a few days two coats of "hard varnish" can be put on, which will render the whole very durable. A dark oak color may be given to rough wood from which the bark has been peeled, by painting with a mixture of one quart of linseed oil, and two ounces of asphaltum. The ingredients are boiled over a slow fire until fully incorporated. As this mixture is highly inflammable, great caution is necessary in its preparation. It would be well to boil it out of doors. Garden settees, chairs, trellisses, etc., can be made of any wood and covered with this preparation, which will give them a rustic appearance little inferior to wood in the bark, and they will be quite durable.....The structure here illustrated is somewhat large and elaborate. But simple, cheap ornaments may be readily provided for the plainest and most lowly country or village home. We have seen a pleasant summer retreat constructed with a few cedar poles, some set up for posts, and others fastened across with withes, or nails, and twigs were woven over the top and part way down the sides. Morning glories were planted around the border, and trailed on the whole. In another case the covering was made with larger twigs, and ivy trained up the sides and over the roof This looked quite pretty in Winter.... We speak often of such adornments of home. They are readily secured; they add to our comfort; they cultivate our tastes, and tend to soften the rough asperity of our hearts; they render the homestead attractive to our children growing up around us, who will be likely to resist the allurements to city life and dissipation, in proportion to the number of pleasing objects with which the scenes of their childhood are surrounded.

Ornamental Trees—Hints for Amateurs.

1. It often happens that the branches of choice trees get badly mutilated. This injury is done by snow-storms, by stray cattle, rude boys or careless workmen. Evergreens in particular are apt to suffer from cows' horns. After growing several years upon the lawn unharmed, developing their limbs in perfect symmetry on every side, and shooting their spiry tops high in the air, the delight and pride of their owner, unruly cattle sometimes break into the guarded enclosure and in a few moments spread desolation around them. Alas, what can the proprietor now do, to repair this waste! Those luxuriant limbs can not be fastened on again, those unsightly gaps can never be filled up! —— Not so fast, dear Amateur. Plant one or two more trees of the same sort by the side of the mutilated ones, select a good branch or branches, and graft or in-arch them into the damaged trees. If the work is well done, it will succeed; the new branch may afterwards be severed from the parent tree, and that tree then be taken away. This process of in-arching is fully described in Vol. XVI, page 184.

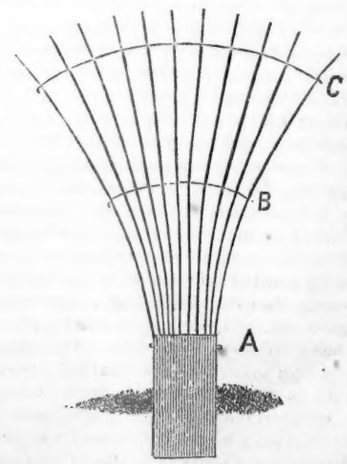
2. Trees are often injured by strong winds blowing uniformly from any direction. This happens most frequently, perhaps, with evergreens, when planted in exposed situations such as the corner of a building, or any unsheltered eminence. The writer of this once had a Norway Spruce, which, as it came from the nursery, was of faultless shape, and he wished to preserve its beauty. But in spite of his wishes, the lower branches on the west side, being exposed to almost constant winds, remained considerably shorter than those above and those on the east side. On the west side, the tree became oval instead of pyramidal. Setting his wits to work, and then his hands, the writer did this: He shortened in the longer branches above, making them a little shorter than the lower tier of limbs. The long branches on the east side were also cut in a little. The ends of these pruned limbs were covered with shellac varnish. Then, to give the lower branches the best possible chance to grow, he got a carpenter to make a light and handsome piece of lattice work, six feet long and four feet high, painted it green and set it up on the exposed side of his favorite tree, some three feet distant from the ends of the limbs. This so broke the force of the winds, that in two years' time, the lower branches shot out with new vigor, and have ever since kept in advance of those above. This happy result has overpaid the labor a thousand fold.

3. To keep a lawn in complete order for many years, it is necessary to replenish it occasionally with new seed and with manure. But in re-seeding, great pains should be taken to get pure seed. Do not take every man's word in regard to grass-seed; but examine the article, before purchasing, with a good magnifying glass, to make sure, if possible, that it contains no foul weeds; else, you will soon have your grounds over-run with docks, thistles, white daises, and the like.

And in manuring, a good coat of old, well-rotted barn-yard manure is perhaps the best thing that can be applied. Yet, it sometimes happens that stable manure is full of the seeds of weeds. When there is reason to suspect this, one had better substitute for it some kind of fertilizer, which is free from this objection, like bone-sawings, Peruvian guano, or wood-ashes.

Simple, Cheap, and Pretty Trellises for Semi-Climbing Plants.

These may be of various devices, according to taste and fancy, but for simplicity, beauty and ease of construction, we have found nothing better than the one from which we have made the annexed engraving.



To construct it take a *straight grained* pine or white-wood board, six to ten feet long, and say 8 inches wide. Plane both sides, and with a ¼ inch bit bore a hole through it edgewise 3 feet from the bottom end. Put a wire through this hole and clinch its two ends, to prevent the board from splitting down further than the sawing at A. Bore similar holes at B, and C, and if a tall

trellis is wanted three such holes are needed. With a chalk line mark off the board into strips, say ¾ inch in width, which will give 11 slats or uprights. The width of the board can be varied at pleasure and fine or coarse work made as desired. The strips need not be over ¼ inch in width, and 16, to 20 even, in number. With a fine toothed saw, split the board in the chalk marks, and put wires, cane, or rattan, in the small holes at B, and C. Spread these slats to any desired width, and the board is ready to be set up. It should stand two or two and-a-half feet deep in the earth, putting the spread in any direction desired. If the holes are no larger than the wires or other spreading rod, the slats will keep their position; otherwise small blocks may be wedged in to keep them apart, or a notched stick may be used.

Trellises of this sort are very convenient for pillar roses, corchorus, etc., and when painted green are quite attractive. It is better to take them down and house them during the Winter.

IN DOOR WORK.

Sweeping by Machinery.

Broom corn is one of the crops that will soon be grown, if grown at all, merely as a curiosity. We shall tell our children that in former times tens of thousands of acres of the best land were devoted to producing a curious plant used in manufacturing sweeping brushes, and we may perhaps raise a few stalks as an ornamental or border plant, to keep alive the memory of a once useful production, but the days of the old-fashioned brooms are soon to be numbered. For some time past we have kept an eye upon sundry patent articles designed to take the place of brooms as dust gatherers, but have been waiting for something to be brought out which should not only be superior to the broom in its operation, but also be sold at a price within the reach of the masses. That implement we have now found, and have proved its value by thorough trial. We refer to "Shaler's Carpet and Floor Sweeper." We may sum its merits by saying that, as compared with a common broom, it sweeps faster, sweeps much easier, sweeps cleaner, wears a carpet infinitely less, and better than all, it does not "stir up a dust"—and is retailed as low as $2. We suspect it will wear long enough to do as much work as two dollars worth of brooms, at the rate the latter article is now sold. While a broom either presses the dust and lint down into a carpet, or flirts it up into the air to fall over the furniture, whence it is again brushed off to settle back upon the carpet, this implement quietly gathers up the dust, lint, hairs, pins, etc., and deposits them in a covered box. Well, well, this is talking rather strongly—a paid for "puff"—somebody will say; but not so, we are only telling what we honestly believe to be the merits of the Sweeping Machine. We hail with the greatest pleasure any thing that lightens and facilitates woman's labors—and man's too. Had some of our mothers enjoyed the advantages of the recent sewing machines, and other modern labor and life saving implements, they might have been saved those mid-night hours of work, and instead of their having gone early to their graves, worn out with care and toil, we might now be enjoying their society and counsel. We look upon some of these recent inventions, such as the sewing machines, the sweeping machines, etc., as the most important event of this eventful era. Not only is life and health prolonged by them, but when the family work can be done in a fourth of the time, by their use, so much more attention can be devoted to the proper instruction and moral training of the rising generation. Our only fear is, that foolish customs and tyrannical fashion will multiply the work to be done in proportion to the increased facilities for accomplishing it. We hope not. But this by the way.

To gratify the curiosity of those who have not yet had opportunity to examine the new Sweeping Machines, we introduce here, illustrations and descriptions of one of them—the Shaler's Patent, which we have now in use.

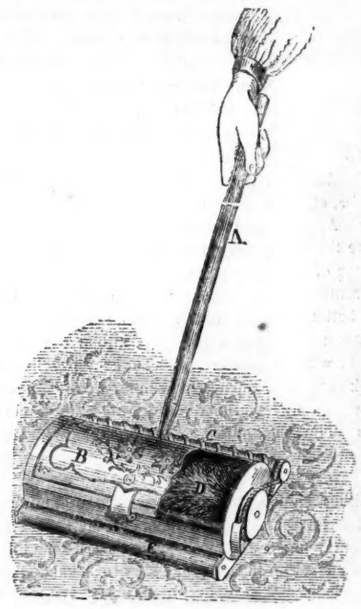


Fig .1.

Fig. 1 shows the sweeper in use upon a carpet. A portion of the cover is removed at *D*, to exhibit the brush. The handle, *A*, is also shortened to save room; this is as long as a broom-handle, so that in using it the person stands erect.

Fig. 2, is an end section showing the internal arrangement. The letters, *A, B, C,..a, b, c,..* used in the description, refer to the same parts in both figures. The main body of the machine, *B*, shown by the double line in fig. 2, is a cast iron box, in form like a sheet of paper bent nearly into a coil, but with the edges turned in as at *e, e*. This leaves an opening at the bottom, through which a long cylindrical brush, *D*, plays upon the carpet or floor. The handle, *A*, is fastened upon one side of this box. *C*, is a roller with a band of rubber running spirally around it, to prevent its slipping on the carpet. On the end of *C*, is a pully, *a*, from which an endless cord runs to the pully, *c*, on the end of the brush, *D*. At the front is a smooth roller, *E*, to make the implement move freely.

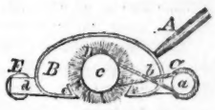


Fig. 2.

It will now be seen that when pushed along, the roller, *C*, revolves, turning the brush, D. The bristles on *D*, pick up whatever dust, lint, etc., may lie in its way, and throw them over the turned up edges, *e, e*, dropping the gathered material into the box, *B*. This takes place whether the implement be moved forward or backward. A lid at the top of the box is opened to empty the box when filled. The bristles are placed spirally upon the cylinder, *c*, so that they enter the nap of a carpet nearly horizontally and pass *under* lint and dust, and throw them upward. This is a peculiar and important arrangement in the implement under notice. We have swept a carpet as clean as it could be done with an ordinary broom, and then run the implement over it, when a considerable amount of dust and lint would be collected which was picked out from the nap. The bristles are too fragile to tear the nap but sufficiently firm to pick up the loose lint. It will be seen that no dust can be raised, as the brush works entirely under cover. We have tried it upon hair, pins, needles and nails, and it almost invariably gathers these articles.

The sweepers are made of different sizes, for different purposes, the most common size is 12 inches in length, and the price about $2 at retail. They will doubtless soon be on sale generally.

Best Mode of Preserving Fruits—New Style of Glass Jars.

Our long-time readers know that we have utterly condemned, as unfit for human food, the old-style "preserves." We have for several years tried to inculcate the fact that there is less risk of loss, less trouble, and less expense, in preserving fruits fresh, or nearly in their natural state, than in stewing them down with sugar to a keeping condition; while by the newer process they are vastly more healthful and more palatable. What we have recommended to others we have ourselves practiced with entire success and satisfaction. We are at this season constantly using the various smaller and larger fruits little altered from their condition when first gathered. The main thing is to put up the fruit freed from air, and then keep them from its contact.

Formerly we depended almost wholly upon what are called air-tight self-sealing tin cans. These have proved satisfactory, though there has always been the objection that with acid fruits, or when the closing has not been entirely perfect, there is apt to be a little corrosion of the tin, and a slight liability of the articles becoming colored or flavored with the salts of tin thus formed. With proper experience and care in putting up, there is no trouble in this respect especially with the less acid (or sour) fruits. We shall continue the use of at least a part of the tin cans we have, and, by the way, some which have been used three years are yet very good.

We have found the style of tin can manufactured by Mr. Lockwood, of Stamford, quite convenient. These are closed at the top with a little tin cup, into which cold water is poured for cooling the wax, and warm water for loosening it when removing the fruit. Some improvements in the top of the can are promised for this season.

Everything considered, we think glass or well glazed earthen ware preferable in all cases, or especially for sour fruits—for rhubarb (pie-plant), tomatoes and the like, provided convenient vessels could be prepared. We have suggested several plans from time to time to glass manufacturers, but until this year have been unable to get just those we have deemed to be of the best form.

Last year we tried common glass bottles with wide necks, flaring at the top, stopped with corks, and covered with cloth dipped in a preparation of one ounce of tallow melted with one pound of resin. These succeeded very well. We have peaches, strawberries, cherries, rhubarb, etc, now in good order. The glass is not corroded of course, and the fruit looks better in the transparent bottles. We have this year procured a lot of Yeomans Fruit bottles, which are in just the form we recommended two years since, and tried to get manufactured but without success.

Fig. 1, (next page), shows the form. It is similar to an ordinary wide-necked bottle, but the neck

is provided with a shoulder on the *inside* for the cork to rest upon. When filled, the close fitting flat cork is pressed in down to the shoulder, leaving room above it for a thin layer of wax or cement to be poured in. For convenience of removing the cork, it is well to lay two strings, crossing each other at right angles, upon the top of the bottle and put the cork upon these when pushing it down; or better still, tie the two strings loosely around the cork and these will serve as a handle for drawing it out with a hook or bent wire.

Fig. 1.

Fig. 2, represents a convenient tin funnel for filling the bottles. Directions for use accompany the bottles. For particulars as to price, etc., address the manufacturer whose card may be found in our advertising columns. They are sent in boxes holding 6 doz. of two-quarts, or 12 dozen 1 quarts, at $1 per dozen for the latter, and $1 50 per dozen for the former, delivered free of charge in New-York, Philadelphia, and at the proprietor's residence. The bottles hold a little less than one and two quarts each. Corks are furnished when desired at about 1c. each. Any kind of glass bottles may be used, if the necks be "flaring" so that the corks will not slip inward. Mr. Yeoman's pattern is best, where they can be obtained.

We have generally used common bees-wax for sealing both glass bottles and cans. A better preparation and a cheaper one, is made by melting and stirring well together very nearly one ounce of tallow to a pound of resin—or say one ounce of tallow to seventeen ounces of resin.

When glass bottles of any kind are used they should be set into a wash boiler or any convenient vessel, and cold water poured around them up to the necks; they will need a cover or weight to keep them down. Heat the water to near the boiling point. This *gradually* heats the glass and prevents breaking when hot fruits are put in.

MODE OF PUTTING UP FRUITS.

The fruits, of whatever kind, should be taken as nearly as possible fresh picked, and at just the ripening point—not over ripe, nor in the least stale.

Berries.—For strawberries, blackberries, and raspberries, take the clean dry fruit, avoiding washing unless really necessary; fill the cans or heated jars *full*, then fill the spaces between the berries with hot syrup. We formerly made the syrup by boiling, and skimming, one pound of good white sugar with one pint of water. Refined sugar is best. Last year we used for experiment from ½ to ¾ lb. of sugar to the pint. The fruit kept well. A good rule is, to use about as much sugar for the different fruits as will be required to fit them for eating—rather more is required where the fruit is to become saturated by long standing in the jars or cans, than when to be immediately used. A small amount of syrup will fill up the spaces between the fruits.

Let the jars or cans stand surrounded with hot water, say ten or fifteen minutes, until all bubbles of air have escaped. Then take from one jar enough fruit, and syrup enough to fill the others just up to the cork or cover. The covers may then be put on to tin cans and when removed from the water and wiped dry around the top, put on beeswax, or the above cement, enough to perfectly close every possible aperture. For glass jars, wipe the neck and shoulder dry, down to the fruit; dip the corks into the melted cement and press them down to the shoulder, with the strings around them as already noted. Next pour melted cement over the top of the corks. Mr. Yeomans says it is enough to simply dip the neck of the bottle into the cement. We would prefer filling the small space above the cork entirely with cement, as it is cheap, and this will more certainly prevent openings by air-bubbles, or cracking. The jars, thus easily filled, may then be set aside to cool, and afterwards be stored in any convenient place—in a chamber, closet, or pantry, or in a cellar. The fruit will come out nice and fresh at the end of six months or a year. The condition of the fruit can be readily examined from time to time—this is a decided advantage of the *glass* jars—and should there chance to be any fermentation visible, such fruit may be used.

Peaches, cherries, plums, apricots, pears, quinces, apples, etc., may all be put up in the same manner. Apples and quinces, of course, require to have the cores removed. They may be cut into pieces of desired size and form. The pits should be removed from peaches, and cherries are all the better for being first stoned, besides the advantage of getting more fruit into a can. It is better with all these fruits, except peaches, to cook them in a separate kettle for five or ten minutes, and afterwards dip them into the heated jars. The main object of heating is to expel the enclosed air. A little heating after putting into the jars perfects the removal of the air. The cooking should never be carried far enough to discolor and soften the outside of the fruit. Apples may be stewed into sauce ready for the table, then sealed up in the cans ready to be used whenever desired—three, six, nine, or twelve months afterwards. We have put up a large quantity thus, at different periods of the year—in the Winter taking jars that had previously been used for the same purpose or for other fruits. All kinds of *stewed sauce* may be seasoned, then bottled and sealed, and be always ready for use.

Tomatoes we put up largely every year, and have now (June) a fair supply, as good as if just gathered and cooked. These we skin, cut, and boil down one-half, and then bottle up. Prepared in this way they are so convenient, and of so good and fresh quality that we make no special effort to secure early new tomatoes.

Fig. 2.

Rhubarb, stewed soft, sweetened as for pies, and bottled, comes out nice and fresh in mid-winter or spring.

Currants and gooseberries are also similarly kept, but these should be mature, not necessarily ripe, and be well cooked and sweetened with a strong syrup.

Green Peas, beans and *corn* may also be kept, but they need to be thoroughly cooked before bottling, or they are liable to spoil.

We repeat in closing, that, though we have made a long chapter in giving particulars, the process of putting up in bottles and cans we find to be less trouble and labor than the old fashioned mode of "preserving" in sugar, while less sugar is required, and a sweet-meat or sauce is thus obtained, far superior in appearance, in taste, and especially in healthfulness.

Healthfulness of Fruit.

Many persons suppose that fruit is unwholesome, especially for children, because their mortality is so great at the time when fresh fruits begin to abound in market. Undoubtedly, the eating of green or partly decayed fruits is injurious to both young and old persons; it was not made to be eaten; though green fruit is little harmful if well cooked. But it is not correct to ascribe the sickness and death of so many children to fruit eating. On examining the bills of mortality of any large town, we shall find that the increase of deaths among children in Summer, is almost exclusively of those under five years of age, and principally of those under two years. Of course they eat little or no fruit. The deaths at the same season among persons between five and twenty-five, those most likely to indulge too freely in fruits, is less than in Winter. The mortality, therefore, of the Summer season, is more probably owing to the increase of heat than to fruit eating. The excessive heats of the day, followed by exposure to the chilly damps of the evening, may help to account for much of the sickness of children in the fruit season.

We once met with the following extract from the London Lancet, a high medical authority: Referring to the health of London during a week in the middle of August, the writer remarks: "The deaths ascribed to diarrhea are 126, of which 115 occurred among children. The tender age of nearly all the sufferers, 97 of them not having completed their first year, is sufficient to dispel the popular error, that the use of fruit is the exciting cause."

Now, let us carry the war into the enemy's country. Fruit, eaten in moderation, is positively wholesome, and its use is demanded by the peculiarities of the Summer season. The most common diseases of Summer, such as diarrhea, dysenterry and cholera, are bilious complaints, and require anti-bilious treatment. Fruits are anti-bilious. A kind Providence causes them to abound at just the season when they are most needed. In the Winter, we may devour meat of all sorts, both fat and lean, and other kinds of food containing much carbon and nitrogen, and no harm will perhaps come from it, because the rigors of the season call for such nutriment; and free exercise in the open air will burn up the carbon; but during the Summer season, a different style of living is required. Experience shows that during the latter season less meat should be eaten, and a greater proportion of vegetables and fruits. The natives of tropical climates long ago found this out, and they act accordingly; while Northerners going there to reside, and keeping up their usual habits of high living, soon fall victims to bilious diseases.

There should be moderation, of course, in the use of a good thing. Fruit should be ripe if eaten raw; it is better to eat it early in the day, and the stomach should never be overloaded with it.

ADDENDA.—To the above, written by an associate, we will add, that after much careful observation, we have come to believe that in ninety-nine cases in a hundred where fruit has proved injurious, the fault has not been in the fruit itself, but in the condition in which it has been swallowed. When it goes into the stomach it must be dissolved in the gastric juice, or it passes through the alimentary canal in lumps, which lumps produce irritation. The undigested por-

tions at the same time ferment on the surface, and form vegetable acids which induce flatulence diarrhea, etc. Children seldom masticate food thoroughly. If all fruit were mashed finely before allowing it to be eaten, it would very seldom cause injury.—Ed.

Poultry—Flowers—and Nellie's Troubles.

Dear Mr. Editor.

It is quite impossible for me to tell you with what glee we all hail the entrance of papa when we see a corner of the *Agriculturist* peeping from his pocket, for each is anticipating the pleasure its contents will give. Papa is a tanner, but he and my older brothers read the articles on farming with much interest, and consider it good authority. Mamma, I believe, hunts up the instructions for raising such plants as we have in our own garden. As for me, I have learned much from grandmother (please give her my love)—from a new game of Aunt Sue, and many other things.

But what has awakened my attention and caused me to trouble you with this letter, is the suggestions of Minnie May. I am not a housekeeper *yet*, I fervently thank my stars, but I assist often in household duties. It is as Minnie says, tiresome to find the same round waiting us day after day. I have found it so, and have tried to take care of the poultry, but will you believe it, my little geese are so silly as to be afraid of me? Now, I'm only sixteen and very *petite* too, but they run off in as disrespectful a manner as if they did not know I intended a kindness when I fill their tub with water. Is it any wonder that I sing,

"If e'er I marry in my life,
No farmer's wife I'll be!"

Mamma assures me there is no danger, for no farmer would want me, nor any other man in his senses. Do you know that last grieves me desperately? for I'm afraid it is true. But to return. The care of poultry evidently being bad for my *nerves*, I have taken to flowers. Here my perverse taste inclines to a bed of moss placed on a plate. With water to preserve its fresh, green appearance, and a few wintergreens with their bright berries scattered here and there, and some wild violets in the center, I have a beautiful ornament for my toilet table.

But still I love other flowers and spend much time in getting them arranged to my fancy. This Spring, however, I am in despair! Papa has taken my neat pretty flower bed for garden strawberries (instigated I suppose by what you have said in their favor). Dear Mr. Editor! what *shall* I do? He don't like flowers in the yard, and I had a bed in his garden. Now won't you ask him to let me have my French running rose, Four o'clock, Forget-me-not, and a few others in the back yard even if it does spoil a little grass? If I can get his consent through your means I'll give you a famous bouquet when you come to Ledgedale—the home of Nellie.

[We trust "Papa" will not disregard "Nellie's" importunity; she will, without doubt, make an ornamental plot that he will be proud of.—Ed.]

Strawberry "Short-Cake."

Having tried the article made after the following directions, furnished to the *Agriculturist* by Jennie V. V., of Queens Co., N. Y., we are ready to endorse them as first-rate—that is, for a "short-cake." To two teacupfuls of sour milk (water will answer where milk is scarce) add one teaspoonful saleratus; when this is dissolved put in one cup of butter or lard, and flour enough to make a soft dough. Roll it out into thin cakes, large enough to fill the pan in which they are to be baked. Dust a frying pan with flour, and bake the cakes *over* the fire, turning as soon as the under side is done, which will require but few minutes. Then split them open while hot and butter well. Have ready a quantity of strawberries well sugared. Lay on a large dish a slice of short-cake, then a layer of strawberries, and so on alternately for five or six layers, and serve *up*—they will go *down* easily.

Ice Cream.

This article is much talked about, and is *supposed* to be largely consumed in our cities; but the fact is, comparatively few persons know any thing about genuine ice *cream*. Ice cream is chiefly *made* in cities and large villages—genuine cream "grows" in the country, and country people are the ones to have and enjoy the 'simon pure article.' There have been two difficulties in the way: first, lack of ice; and second, the amount of apparatus and labor required. But ice-houses are becoming quite common, so that in many places ice is always readily and cheaply accessible the year round. As for the apparatus, a good freezer is now got up so cheap, as to bring it within the reach of a majority of persons. The best freezer we know of, is retailed as low as $3 each for the smaller (3 quarts) sizes. The freezer is complete in itself, requiring only the ice and salt to be put in——and the cream of course. This apparatus is so simple, and yet so philosophical, that a description will be interesting.

Fig. 1 shows its outward form; the smallest size, for making 3 quarts of cream at a time, is somewhat taller than a large pail.

Fig. 2 shows the internal portions. The cylinder to hold the cream is so arranged, that by turning the crank one way, the cylinder itself is revolved in the surrounding ice and salt; while by turning the crank backward, only the wooden

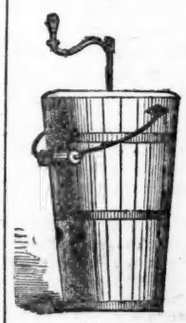


Fig. 1.

Fig. 2.

blades within are moved, including a scraper kept pressed against the cylinder by a spring, which removes the thin film of frozen cream formed on the tin. And just here lies the beauty of the invention—got up, not by a Yankee, by the way, but by a Pennsylvanian, and an *editor* at that, (H. B. Masser, editor of Sunbury American.) In the ordinary mode of freezing, the ice formed on the outside of the mass of cream, acts as a non-conductor, and the internal portions are slow in congealing. In this freezer, the instant a thin film is frozen, it is scraped off and mixed with the whole mass. The wooden blades also keep the whole cream well beaten. The freezing is of course quickly performed, requiring little labor, and but little ice and salt around the outside of the cylinder.

The best, cheap, freezing mixture, is about one part of common salt to four parts of ice pounded very fine—if as fine as peas all the better.

For *cream*, good sweet cream, with sugar to the taste, and flavored with extract of lemon, pine-apple, or vanilla, is all that is necessary. About 7 ounces of white sugar is required for a quart of cream. Those who can not get real cream, may use, as a good substitute, sweet milk and eggs, well beaten together, say 2 eggs and 6 to 8 ounces of sugar to a quart of milk. Cook carefully for 20 to 30 minutes, then cool, flavor, and freeze.

The following Recipe is furnished by Mr. Masser, by which, he says, superior cream can be made for 18 cents per quart:

"Two quarts good *rich* milk; four fresh eggs, three quarters pound of white sugar; six teaspoons of Bermuda Arrow Root. Rub the arrow root smooth in a little boiled milk; beat the eggs and sugar together; bring the milk to the boiling point; then stir in the arrow root; remove it then from the fire and immediately add the eggs and sugar, stirring briskly, to keep the eggs from cooking, then set aside to cool. If flavored with extracts, let it be done *just before* putting it in the freezer. If the Vanilla bean is used, it must be boiled in the milk.

For the American Agriculturist.

Cook Books—Letter from a Housekeeper.

Mr. Editor:

I noticed an article in the April *Agriculturist*, upon the unreliableness of cook-books, which expressed my views exactly. Now let me ask you and all concerned, why somebody does not seize the opportunity here presented, to make his fortune by compiling a book that *can* be depended on? I want, and many others want, a manual teaching housekeepers how to make various dishes which are not used in the common round of domestic life. Is there no superannuated baker, or retired confectioner, "whose sands (or sugar) of life have nearly run out," who would like to immortalize himself, as well as make money, by publishing such a book? I pause for a reply.

I should occasionally like hot rolls for breakfast, or "rabbits in pantalets" for dinner, or those nice tea-biscuits and macaroons for supper, and that too of my own making; but I don't know how to do it, and can get no light on the subject from any book on cookery or from my neighbors. I have probably wasted flour enough to buy a dozen cook-books, just in trying to make "French bread;" but the hard times forbid any further experiments, and now *I want a book*.

Further, as I have a pen in my hand, and not flour, let me go on to ask how carpets which have once seen better days can be shaken. One of ours is what Sam. Weller would call "wentilation gossamer." Really, I am afraid to look sharply at it, lest I should pierce holes through it. As for shaking it in the ordinary way, that would completely ruin it. If, as it is said, the most delicate perfumes are made from horses' hoofs and dog-tails, why can not some agent be discovered that shall extract dust from an old carpet, and make it rise in clouds of incense, or in some other form? Please relieve my anxieties in your next. Jemima.

P. S. My Sewing Machine works wonders. I put in the cloth, and lo! in a short time, the boy's pantaloons come out with the knees already patched, and the socks darned after the most approved style. When I have no important work for the machine to do, I employ it to sew up my husband's coat-tails and our bed sheets.—Don't forget the cook-book. Jemima.

Tomato Soup.—A. D. Ferrer, Fergus, C. W., writes that a pot of soup even fit for Esq. Bunker, may be made as follows: Take about two dozen ripe red tomatoes, a large teacupful of cream, with a good beef bone for a "strengthener," season with pepper and salt, and boil in sufficient water for two hours.

"THE CUT FINGER"—From a Painting by G. Edward Frebe.
(*Engraved for the American Agriculturist.*)

The Editor with his Young Readers.

Here's a picture for you, boys and girls, that *is* beautiful. It is to *us*, one of the most interesting we ever saw. We can not *tell* exactly why, but it goes straight from the eyes to the heart. Don't it go right to yours, boys? Did you never hurt your finger and run to sister to bind it up? (*We* have—and this picture calls to mind more than one scene of our boy-hood days)—And did she not express, and feel, too, such sympathy and kindness as the girl in our picture shows? Perhaps you never thought of it, but you will now, when you can look on as a spectator—not as the little half frightened boy himself, who looks and feels just exactly as you and *we* have looked and felt. See how his feelings show out even in his right hand. The wound may be only a trifling one, but to him it is a very serious matter. He feels so, as you can see by the expression of his eyes and face. But our eyes wont keep away from that good, kind, anxious sister. See how skillfully, and yet how gently she handles the wounded finger. Her whole sympathies and attention are enlisted in alleviating the pain. We don't believe she knows that one of her shoes is half off. Well, this sister is like almost every other sister, whose heart has not been made callous by rude, unkind-treatment from a brother, and even then there is always a tender spot left which will be touched when pain or suffering comes to even the most ungrateful boy....

BUSY.

We can hardly stop for our usual chat this month with our young friends—we're so busy. Do you imagine, boys, that while you are driving away at work, your friend, the editor, is quietly esconced in some cool room with little to do? Not a bit of it. The past two months we have been on our *new* homestead every moment we could spare from office duties, with coat and vest off, plowing, harrowing, spading, digging, planting, etc., sweating like a beaver, and how we have enjoyed it. We only wish the *Agriculturist* would go on itself for a while, or we could dream it out at night, and thus have time to stay out-doors all day, every day in the week. This out-door work is just the thing to make one feel well and be well. Did you ever stop to think

HOW WORKING MAKES ONE STRONG.

We'll try and tell you. In our bodies are two sets of little tubes or blood channels called arteries and veins. The main *arteries* go from the left side of the heart, first one large tube, which divides into branches like the limbs of a tree; then these branch more and more, until they reach the minutest point in the body. The end branches are smaller than the finest hairs, yes, so small that you can not see them. At the end of these arteries begins the other set of fine tubes called *veins*, which grow larger and larger, and continually run into each other, until they finally form one large vein that opens into the right side of the heart. There is a second set of arteries from the right side of the heart to the lungs ("lights"), and there they join a *second* set of veins, which come back to the left side of the heart. Now see how the blood flows. First the heart contracts ("beats" or draws together), and drives the blood out through the first set of arteries. We can feel it as it is driven along in the wrist *towards* the fingers. The arteries are packed away deep in the flesh, near the bones, so as to be out of danger, for if cut or broken, the blood would be driven out forcibly every time the heart beats. At the end of the arteries the veins, which are larger, pick up the blood and carry it back more slowly to the heart. The veins lie more on the outside, and the blood does not "spurt" out when they are cut. When the blood gets to the heart, it is thrown from the right side into the lungs, where it comes in contact with air, is purified, then returns through the second set of veins to the left side of the heart, to be again sent out all over the body. But these blood vessels pass among the muscles, that is, the portions of lean flesh which are used when we move our limbs or bodies. By exercise we keep drawing the muscles down upon the blood vessels, and this pushes the blood along through them much faster than it would go if we were not moving. Now the blood carries the food that nourishes us—it can not get from the stomach into the flesh, except the blood carries it—and small particles are left here and there to build up and make strong every part of the body. So, by exercise, we work the little hose-pipes (the blood vessels)—they carry more blood—more blood carries more food—and more food makes us stronger. The active *working* boy on the farm or elsewhere, has more strength than half a dozen band-box boys who do no work, but have servants to work for them—and we guess they are worth half a dozen of them for active service. We must tell you more about the way the food gets into the blood, and some other curious matters concerning our bodies, some time, when we have leisure to make engravings. There are many very surprising things constantly taking place within us, all going on so smoothly that we cannot perceive them, unless some of the machinery gets out of order.

IT WILL COME OUT.

We had a hearty laugh the other day at a neighbor of ours, who found himself in a rather ridiculous "fix." He had learned to smoke tobacco, and, as cigars were rather expensive, he used a pipe; but although he no doubt thought it quite an accomplishment, he was yet rather unwilling to be seen smoking, by every one. When any one whose good opinion he valued, came in sight, he would hastily put it aside. The other day as he was puffing away, a gentleman called, and having no other place to hide his pipe readily, he shook it out as he supposed, and tucking it quickly into his pantaloons pocket walked into the parlor. While engaged in talking he was very much startled by the gentleman exclaiming "Why John you're on fire!" He sprang up, and sure enough the smoke was pouring out through a hole which had burnt through his pantaloons, and of course the hidden pipe came to light. You may be sure John was quite crest-fallen. It is to be hoped, however, that he learned the lesson that, however we may attempt to conceal our faults, they will at length come out—sometimes in a way least expected and most mortifying.

POOR TRAY.

Animals sometimes have bad habits and thereby get into scrapes, as well as human folks. We were quite well acquainted with a farmer's dog in the eastern part of New-York State, named Tray, that was once caught in a curious way. He used to run out and bark furiously at every thing that passed in the road near the house, which, although not injurious—for he did not bite—was very ill-mannered and annoying. It happened that a rail-road was built through the farm, quite near the house of Tray's owner, and when the cars commenced running, the dog would rush out whenever they came along and bark, and snarl, and snap at the wheels, to the great amusement of the passengers. One day he ventured a little too near, so that his ear was laid upon the track, and of course the wheel took it off in an instant. Ki' yi! yelped poor Tray, and turned to "cut" for home, but turning so suddenly he brought his tail where his ear had been, and that too was as quickly severed! You may be sure he quit one bad habit—his usual flourishes were most effectually *cur-tailed*. That came from being ill-mannered—don't forget the lesson.

THE FAITHFUL CHICK-HEN.

Having given a specimen of the failings of animals, it is but fair to record some of their virtues, and the following account sent to the *Agriculturist* by J. R. Brown, Columbiana Co., O., will do very well to offset Tray's delinquencies. He writes: "Among the many old hens that hatched and brought forth their brood last Summer, there was one that was the mother of six little chicks, all of which died, save one. This one she weaned, or tried to wean, but to no purpose, for the '*little one*' would not be weaned. After a while, the hen commenced laying again, and chicky would go to the nest every day, and stay with her mother till she performed her duty. This she continued to do till the old hen commenced setting. They then both set together. The chickens were hatched, and our faithful chicken took as much care of them as did the old hen, except she could not scratch quite so hard. But by an accident the *old mother* went the way of all fowls, and the poor little orphan at the age of three months was left with a family to take care of. Bravely did she attend to the little chicks, although the loss of her mother was very sore. It was very funny to see such a young hen clucking about with a brood of chickens. This may seem a strange story, but it is every word true. Is not this little chicken an example to the girls of the *Agriculturist* family?" [Yes, it is, and we know a little girl, only 10 years old, who did the same thing for her half-orphaned brothers and sisters.—Ed.]

THE "FOURTH."

The heads of the little folks in this part of the world are so full of thoughts about Independence Day, that it is difficult to specially interest them about any thing else. Some of them have been saving their pennies for months, to spend on that day for fire-crackers, powder, and

other apparatus for making a noise. Well, the day should be a national holiday, although we would prefer a more rational way of celebrating it. It always makes us feel sad to read the accounts of accidents with which the papers are filled after every Fourth. We can never forget the shocking sight we once witnessed of one of our playmates, who was terribly mutilated and disfigured for life by the premature discharge of a cannon, near which he was standing. Poor little fellow! no doubt every one of those engaged in "celebrating," would willingly have given all the pleasure the day had afforded, to ease his sufferings. Yet we can hardly find it in our heart to say, buy no fireworks, as long as the custom is so prevalent. Boys can not be expected to take the lead in reforms; yet a noble-minded boy may do much, if he be fully in earnest, and we would like to find many such in the *Agriculturist* family. We will make a suggestion. Grandmother, in another place, has given the girls some advice about their habits. Now we propose that each of our young readers—the older ones too if they choose—shall think of some one bad habit he may have, and on the Fourth of July declare his

INDEPENDENCE

by resolving to overcome it. Just try it. put it down in writing, and our word for it, when you have fairly conquered, you will rejoice in the noblest kind of freedom.

SAD NEWS—DEATH OF UNCLE FRANK.

Our young friends will have no more chats with Uncle Frank. (His full name was Francis C. Woodworth). Only last September we introduced him to our young readers, but ere his first year with us had expired, his voice and his pen are stopped by death! His last letters, as you have all noticed, were dated in St. Augustine, Fla., whither he had gone to see if a warmer climate would not benefit his failing health, but, as we feared, when we shook hands with him at parting, near the close of the Winter, the insidious disease—consumption—had taken a relentless hold upon his lungs. His recent private letters read cheerfully, yet there was something in them indicating that he was failing. He started home, and arrived in our harbor in the steamship Savannah, on June 5th, but breathed his last before he was brought on shore.... Uncle Frank, though he had no family of his own, was a great lover of children. He has written some *thirty-five* books for children, among which were "Uncle Frank's Home Stories;" his "Boys' and Girls' Library;" "Theodore Thinker's Tales," "Stories about Animals," etc., etc.... Well, so it is—one after another goes. Soon, some one else of us will be taken away. Let us each do all the good we can, so that when our turn comes, it may be said of us, that we have lived usefully.

PROBLEMS.

NO. 39—ILLUSTRATED REBUS.

We will, for once, give a very full explanation for the younger readers, many of whom do not exactly know how to get hold of such puzzles. In the above picture you see two I's, which stand for *two*; they are under a stand: then a picture of a grate; a sign with D on it; a little girl whom we often call 'sis'; the letter A; two marks; a hoe; a wing; a man eating soup; an ear of corn; an eye; the word 'or'; a cap; and a city. Now let us put these things together in their proper order. Two (under) stand grate D—sign s—is a mark—s hoe wing soup—ear—eye—or—cap—a—city. Now pronounce these rapidly, or read them by the sounds, and we have: "*To understand great designs is a mark showing superior capacity*," which is the answer. Rather tough this, we think, as but five have sent us solutions. They are "Aunt Sue;" Samuel S. Kerr; G. Werlich, James Freeman Allen, and Henrie Ball.

No. 40.—The Labyrinth.—The little folks, and some of the older ones we know, have been much entertained and puzzled trying to find their way into the bower. Quite a large number have written to us of their success; most of them have sent diagrams showing the path they took. We are sorry that any should cut their *Agriculturist* to get the picture to send. This can be avoided by laying a piece of thin paper over the picture, and tracing it with a pencil. Writing paper, oiled and dried, and laid over a picture, will allow the lines to show through, so that they can easily be followed——Correct answers sent in by: J. Emily Fitch; H. E. Spalding; Edward Lamphere; John P. Moore; G. W. Reanan (with a verse about his journey); Sarah D. Lord; D. W. Huntsman (worked it out backwards); Absalom G. Allison; Mary Campbell; Henry B. Wigall (11 yrs., with a drawing done with much pains); J. B. Andrews; F. W. Luttgen; Bell Banker; Granville M. Flenner; Harry La Fetra (very neatly done); Roscoe Mowbray; Milton Mowbray; James G. Hendall; Augustus Wasserscheid; Charles I. Simpson; Willie B.; James D. Farlow; Mary Halladay; William O. Ligon; Wm. H. Thornton; I. C. C.; N. H. Mann and N. H. Allen (with a funny sketch showing how the dogs were set on them when they got into the bower, and how they jumped the fences to get out); Thomas B. Kelsay; G. H. Witthaus, Jr.; Joseph Leas; Louisa E. Newbaker; Solomon G. Parsons; Mahlon Day; Robt. H. Givan; Malissa H. Givan; Sanford E. Givan; W. W. Morris; John W. Givan; Sarah Jerman; J. O. Strong.

No. 41. *A Genealogical Puzzle.* The curious Family.

In a family of 4 persons, related by marriage or descent,
No. 1 was his own grandson.
No. 2, the son of No. 1, was his own grandfather.
No. 3 also son of No. 1, was brother to his own grandfather.
No. 4 son of No. 2, was nephew and also uncle to No. 3.
How could this happen?

SHARP CORRESPONDENCE ABOUT REBUS 37.

This Rebus, as will be seen by what follows, has continued to attract attention even after the solution was published, it being so complicated that some are unable to "see it" even with Aunt Sue's explanation before them. As she gave a good rendering of it, we leave her to defend it against criticism, adding, however, that the fly in the puzzle was a *Bee*. Perhaps the *sting* should have been shown, but as Aunt Sue has put that in her letter, it answers every purpose.

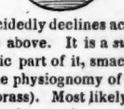
Mister Editur

Im a great patron of *genus*, and accorden, I send you a goold medil for "Aunt Sue"—Sich extensive flashes, and *stretches* too, of fancy to make sense out of nonsense, ort to be rewarded. How she makes bench mean "form," she does not sho us, and what she does with — (mark or dash,) and "fly A," we are left to *wonder* about. Bee shure and send her the medil—and oblege yourn

JESSE T——

——, Missippi 10 May 1859.

Here is a full size picture of the "medil," which we immediately sent to Aunt Sue, accompanied by the letter awarding it to her, and here is what she says about it:



Know all men, women and children by these presents, that Aunt Sue respectfully and decidedly declines accepting the "goold medil" referred to above. It is a *suspicious* looking "medil"; the metallic part of it, smacks of a material that goes to make up the physiognomy of men not over-burdened with modesty (brass). Most likely Mr. T—— *set his face against it* before he sent it.

Then—Mr. Editor—it has four holes right in the center, not such as are found in Spanish quarters, punctured for the value of the metal, but evidently with the sinister design of placing an attachment (a needle-and-thread one) upon it some day. It is *bear*-ly possible that Mr. Jesse T. might have hoped I should fasten it on my lip; button deed! (that means but *indeed*) I shall do no such thing.

Touching the "bench," let him apply to Webster for in-*form*-ation; and for the matter of the "— (mark or dash)" it is the (*minus* —) character that stands against his amount of grace, I'm afraid. To return (to) the medil, allow me, through you, to *give it Jesse* again.

With becoming indignation,
Yours truly, AUNT SUE.

"LET ME KISS HIM FOR HIS MOTHER."—The editor of the New-Orleans *Advocate* tells this incident about the ravages of the yellow fever in that city, related to him by one of the Methodist pastors: "The preacher was called a few days since to attend the funeral of a young man. Before his sickness he was a stout, buoyant, manly youth. He was from the State of Maine, and had been here but a short time. He was attacked with yellow fever, and soon died, with no mother or relative to watch by his bed-side or to soothe him with that sympathy which none but those of our own 'dear kindred blood' can feel or manifest. He died among strangers, and was buried by them. When the funeral service was over, and the strange friends who had ministered to him were about to finally close the coffin, an old lady, who stood by, stopped them and said, 'Let me kiss him for his mother!'" Was not that a touching scene?

Looking out of his window one Summer evening, Luther saw on a tree at hand a little bird making brief and easy dispositions for a night's rest. "Look," said he, "how that little fellow preaches faith to us all. He takes hold of his twig, tucks his head under his wing, and goes to sleep, *leaving God to think for him.*"

Grandmother with the Little Girls.

REPORTED BY COUSIN MARY.

MY DEAR MR. EDITOR: Every now and then we gather around Grandmother and ask for a "talk" which she always grants, when not too unwell. I send you a report of what she said this afternoon, as this is now fresh in my mind. MARY.

Well, girls, I saw something to-day which suggested my talking a little about habits. There are many bad habits which even very good girls indulge in, and which they will find it very hard to break off as they grow older, for the habits grow as fast as they do themselves. Let me tell you a few of them, and if you look for these and try to break them now, you will get in the way of watching yourselves, and perhaps find out other habits which I do not mention, but which should be overcome. Some girls I know are accustomed to stare at strangers. If a gentleman whom they have not seen before comes to visit with their parents, he would think from their watching him, that they had never seen a man before, or that they kept their eyes upon him for fear he might steal something. When they go out to walk they are continually twisting their necks about to see all they can of persons who may be passing. I one day saw a little girl doing this, and as she was walking one way, and looking another, she ran plump into a filthy puddle. At another time she came very near being run over by a horse while she was staring at some one behind her. I have seen children sit in church and make themselves very disagreeable by gazing into the faces of those who sat near them, instead of attending to what the preacher was saying, and thus also keeping others from listening attentively. Now anything that makes other people feel uncomfortable, when there is no necessity for it, is ill-mannered. Politeness is making those around us feel as pleasant as possible, and there is no surer way of gaining the good-will of others than by being polite.

It is a very troublesome and unpleasant habit which many little girls have of causing people to repeat what they have said by asking "what?" as soon as they have finished speaking. When a person, especially one older than yourself speaks to you, it is proper to give good attention to what is said: but if a child immediately asks, "what did you say?" it appears like uncivil inattention. But it is often done from mere habit. One of my little friends who came to spend a few days with me had such a habit. One day I said to her, "Hattie, would you like to take a ride with me this afternoon?" "What did you say, Grandmother?" replied she. "Never mind," said I, "it's not of much consequence." "Oh! yes, I would like to go very much," said she. After catching her a few times in this way, she became ashamed of it, and by watching herself she soon overcame the habit.

Be careful not to get in the way of making odd motions with the lips, or twisting the face into some curious shape. There is a disease with which some people are afflicted, called the "megrims" which causes them to move and twist about very strangely. Their limbs jerk and twitch, and they sometimes make very curious faces. This they cannot help, and they are greatly to be pitied. But there is no such excuse for the strange motions children sometimes make from habit; such as biting their lips, wrink-

ling their foreheads, twitching their noses or continually winking their eyes. Such habits are sometimes formed by imitating these motions in others. It would be very mortifying when you are grown to be obliged to make these motions, for habits sometimes become so fixed that a person cannot control them.

Some children have a very awkward way of sitting. They bend over and rest their elbows on their knees, or cross their feet, or sit with a foot under them, or get into some crooked shape that is not only ungraceful but injurious. Always sit straight, with the feet upon the floor. You need not look as stiff as if you had been dipped in starch, for that would be worse than looking careless. An easy, natural position, letting the hands and limbs take care of themselves without fidgetting to get them into shape, will be the most pleasant for yourselves and for those who are in your company.

I don't think I need say a word about scratching the head, picking the teeth, biting the nails, and such vulgar practices. Your own good sense, I am sure, will tell you that anything of that kind which needs attention should be done in your room, or in private. It would take too long to tell you about all the habits you should avoid. What I have said will be enough to think about for a while; at some other time I may have another chat with you on the same subject.

Into which are thrown all sorts of paragraphs—such as NOTES *and* REPLIES *to* CORRESPONDENTS, *with Useful or interesting Extracts from their Letters, together with Gleanings of various kinds from various sources.*

What Blights the Rose Bushes?—"Eliza," Queens Co., L. I., sends the following letter for answer in the *Agriculturist*. "What is the matter with my rose bushes? They look as though a fire had been among them, and left scarcely a green thing. My choice hybrids, selected from the list you gave in a former paper, have already ceased to bloom, and my climbers are anything but ornamental. Is it a blight that has come upon them, or was it the frost in the early part of the month."……If our correspondent will carefully examine the leaves of the bushes, she may discover a small green worm about half an inch long, very busily feeding on the upper side of the leaf, leaving the veins and the underside untouched. A solution of whale-oil soap, 1 lb. to 7 gallons of water, applied with a syringe or otherwise, will kill them. If this can not be had, they may be picked off by hand, though this is a troublesome operation.

Mildew on Gooseberries.—A. D. Ferrier, Canada West, writes that mildew may be prevented by thoroughly dusting gooseberry bushes with plaster, when the close sultry weather occurs in which mildew is likely to be produced. This, he says, should be repeated at intervals throughout the season of such weather.

To Repel Insects from young Plants.—B. R. Palmer, Clinton Co., Iowa, writes that he has kept his growing garden plants, cabbages, cucumbers, melons, etc., free from insects by sprinkling them every morning with water in which hen droppings have been soaked during the night. This application, even if not destructive to insects, will stimulate the plants to a rapid growth, and thus soon put them beyond the reach of such depredators.

Tree Caterpillars.—S. B. Ormsbee, Dodge Co., Wis. The large worm in the bottle came safely to hand, and proves to be the *Attacus Cecropia*, often found in this region on apple and pear trees, and also upon the smaller fruits. Being of such large size it requires abundance of food, and to obtain it, it does considerable mischief. We have never found them sufficiently numerous to cause extensive injury. The best way to destroy them is by hand picking. The cocoons are very large and conspicuous, hanging from the bushes during the winter when they may be easily destroyed.

Silk-worm Eggs Wanted.—There has been much inquiry for these the past Spring. The stock of the older silk growing countries in Europe has become diseased, and parties are now in this country to obtain a supply of eggs where the disease is not known. Not many years since silk worms were quite common in this country, but we have been unable, this year, to point to a locality where eggs could be had.

Propagating Roses.—Mrs. T. H., Litchfield Co. Conn. It will be well to layer new wood in Summer, say in July or August. The process is illustrated in June No., page 163, under "Carnations." They will be quite sure to root well. To propagate by cuttings requires practical skill, which may be best learned by observing, and following the directions of an experienced gardener. See article on page 211.

The Cypress Vine.—E. Dickinson, Hampden Co., Mass., writes that he succeeds best in raising this favorite ornamental vine, by soaking the seed in hot water, and planting early in June. He recommends shading the ground when they are planted for two or three days, after which the plants are strong enough to stand the sunshine.

Wild Flowers from Minnesota.—O. M. Lord, Winona Co. Thanks for the flowers you sent; they were so compressed and wilted that it was difficult to make them out. The yellow variety is recognized as the Belle-wort (*Uvularia*). We doubt whether these would add much to the flower border.

Large Strawberries.—Dr. Habel, Westchester Co., N. Y., recently exhibited at the *Agriculturist* office, specimens of fruit from two new seedlings which came up in his beds from seed accidentally dropped. They measured from 3 to 5½ inches in circumference, the largest one weighed ¾ of an oz.; and most of them were ½ an oz., or more, in weight.

Large Gooseberries.—Thomas Graves, of Paterson, N. J., informs us that in that city they have an annual show of Gooseberries, and the specimens are weighed as in England. He sends for the *Agriculturist* the following list of the weights of some varieties, as shown for 8 years past. The weight was sent in pennyweights, (dwts.) and grains. An advoirdupois ounce contains 437½ grains.

Years.	*Name.*	*Color.*	*Weight.*
1851	Pilot	Yellow	13 dwts, 1 gr. (313 grs)
1852	Pilot	Yellow	14 dwts. 7 grs. (343 grs)
1853	Conquering Hero	Red	14 dwts, 20 grs. (356 grs)
1854	Teaxer	Yellow	19 dwts, 20 grs (465 grs)
1855	Peru	Yellow	18 dwts, 0 grs. (432 grs)
1856	Thumper	Green	17 dwts, 0 grs, (408 grs)
1857	Peru	Yellow	18 dwts, 15 grs. (447 grs)
1858	Speedwell	Red	19 dwts, 21 grs. (477 grs)
	Greed Overall	Green	19 dwts, 12 grs (468 grs)
	Careless	White	19 dwts, 14 grs. (470 grs)
	Washington	Yellow	19 dwts, 10 grs. (466 grs)
	Paterson	Green	18 dwts, 10 grs. (442 grs)

It will be seen that seven of these specimens weigh over one avoirdupois ounce each. The Washington and Paterson varieties are seedlings raised in Paterson. The others were imported from Lancastershire, England. The exhibition this year will occur on the 18th July, at George Parrott's, No. 301 Straight-street, Paterson, and all who desire to see large gooseberries are invited to be present, free of charge, of course. Mr. Graves informs us that the prospect is fair for a show of larger berries than ever before.

Why are Trees dwarfed? etc.—Subscriber, Des Moines Co., Ia. This operation is performed on trees, partly to make them more ornamental, and to bring them into earlier bearing, but mostly for economy in planting, as a larger number of trees can be set upon an acre. We do not think, however, that much is gained in this respect. Room in an upward direction is so plenty, that probably more pears can be realized per acre from standard than from dwarf trees, while dwarfs are much less certain in their growth and bearing. We are not aware that plums are dwarfed. Peaches have been reduced in size somewhat, by grafting on plum stocks.

Sowing Grass with Buckwheat.—L. B. Pratt, Crawford Co., Pa. This cannot be recommended, from the fact that the buckwheat with its dense growth shades the ground too much for any other plant to thrive with it. Even weeds, except hardy perennials, have but little chance in a season favorable to the growth of buckwheat.

Sorrel for fertilizing the Soil.—W. D. B. Van Buren Co., Mich. All vegetable matter returned to the soil probably increases its fertility by furnishing to it elements which the plant has appropriated from the atmosphere. But we should hardly cultivate sorrel for this special purpose, when clover will do so much better; nor is it good in theory or practice to make the fertilizing properties of this or any other weed an excuse for allowing it to grow in place of other more useful plants.

Why do Onions grow to Scallions?—B. R. Palmer, Clinton Co., Iowa. In the pamphlet on Onion Culture, lately published at the office of the *Agriculturist*, will be found the greatest amount of information on this and other matters connected with the onion crop, that we have met with.

To kill Skunk Cabbage.—L. G. Lowe, Plymouth Co., Mass. This plant delights in low swampy situations, and will soon die out if land be sufficiently drained. Where this is impracticable it will be difficult fully to eradicate it, although repeated pulling out by the roots will finally destroy it. Cutting the leaves just below the crown, and treating the stump to a handful of salt may be tried. It would probably discourage its growth at least.

Stacking Hay in the Field.—L. E. Andrews, Berkshire Co., Mass. The practice is not to be commended, except where it is impracticable to find shelter for the hay, or to stack it in the immediate vicinity of the farm buildings. The stock must be exposed while feeding unless temporary sheds are erected, which is seldom done; much manure is wasted; a bad spot is left in the meadows, and very often a great crop of weeds from seeds among the hay find a good bed among the surrounding manure, showing by their presence for years, where the stack was located.

Cementing the Floors for Hay-mows.—Jared P. Smythe, Dutchess Co., N. Y. To cement the floor of the hay-mow would make a very nice, smooth bottom, preferable to earth, perhaps, as it would prevent the escape of moisture from the earth below. It would not answer well, however, to lay the hay directly upon this flooring; the bottom layer would be liable to heat and spoil. Rails or other timber should be laid upon the floor. This leaves room for circulation of air below.

Try Hydraulic Cement before buying it.—J. H, Queens Co., L. I., suggests that parties purchasing hydraulic cement or water-lime, may easily ascertain if it is in good condition, by mixing up with water in the usual proportion a small lump, say of the size of an egg, and leaving it to dry in the sun about two hours. It should then continue to harden if placed in water, but if it grows soft and crumbles easily, it is worthless.

To Remove a Film from the Eye.—H. Brown, Suffolk Co., N. Y., writes that a film may be removed from the eye of an ox or other creature, by filling a goose-quill with ground ginger and blowing it into the diseased eye, repeating it several times in the course of a day or two. He adds, it should be done as soon as the film is discovered.

Improved Stock in Greene Co., N. Y.—"Veritas" informs us that a fine addition to the stock in Greene Co., N. Y., has lately been received; being a present to Hon. Zadoc Pratt of Prattsville, from Mr. Israel Cross of New-York City. The animals, a bull, cow and calf, are of Durham and Herefordshire origin, from the herd of Morris Ketchum, Esq., Conn. It is certainly desirable that the best breeds of animals should be introduced into such localities.

Feed for Cows.—J. L. Rice, Jefferson Co., N. Y. We should not advise to feed sour milk to cows: it is not their natural food, and on several accounts would not seem to be well adapted for the production of healthful milk. Barley meal has been found very good for milch cows we believe. It is better to feed it ground or cooked, with cut hay or grass.

Can Heaves be Cured?—W. T. Wylie, Northumberland Co., Pa. The nature of the disease is such that a *general* answer can not be given either in the affirmative or negative. Horses sometimes exhibit symptoms of this disorder which may be removed by proper treatment, and perhaps most cases could be relieved if taken hold of in time. Where it is chronic, it is probably incurable. Being usually caused it is supposed by indigestion induced by over work, improper feeding, etc., a treatment to improve the digestive organs has been found efficient in its alleviation.

What is the best Farm Dog?—E. F. Archer, Parke Co., Ind. The terrier, black and tan, or Scotch, is probably best for general purposes. They are small, active, watchful, and courageous, and will, if properly trained, keep all roving stock and swine from the premises, and fowls from the garden. They are first-rate for hunting rats, woodchucks, skunks and other "varmints." The Colly, or Scottish Shepherd dog, is unequaled for the management of sheep, for whose company and care he seems to have an instinctive liking, as the terrier has for rat-killing.

How Long Will a Horse Live?—L. D. Gershon, Chautauque Co., N. Y. From 30 to 35 years may be considered the average age to which horses fairly used will attain. Rare instances have been known where they have lived 40 and even 50 years.

Put up the Bars!—James R. Leute, Ulster Co., N. Y., in a lengthy communication, for which we cannot find space, very properly urges the necessity of care in keeping all entrances to fields carefully closed against marauding pigs and stock of all kinds, that sometimes in an hour destroy the fruits of weeks of hard labor. We do not think it necessary to say much on this head; the penalty for neglect is so heavy that if this does not cure the negligence, any thing that could be said certainly would not.

A Question for Bee-keepers.—S. P. Campbell, of Minnesota, asks the following question of the Bee-men, the answer to which he says he has been unable to find in their works. "How does the Queen become impregnated in the Spring if the drones are all destroyed in Autumn? It seems certain that there are none until after a brood hatches, when they show themselves quite freely."

Signs of Rain.—W. F., writes: "On enquiring of an acquaintance a short time since whether he thought it would rain soon, he replied, "I can not tell with certainty, as I have not blacked my boots this morning." He then explained his remark, by saying that when rain is impending, there is so much dampness in the air as to render it difficult to give leather a good polish with common blacking. Another "sign" on the same principle is that ink used in writing, dries from the paper very slowly 'just before rain." [We should say that the value of the above "signs," depended very much upon the *quality* of the blacking or ink, and of not much account at any time.—ED.]

Chamber Slops for Manure.—J. H. North Broome Co., N. Y. Chamber slops, suds, etc., from the house are a highly stimulating manure for the vegetable garden. Almost every family can derive enough manure from this source to keep a large garden in prime condition, especially with the addition of muck or soil from swamps or woods. A hogshead sunk in the ground into which the slops may be thrown and the muck mixed in, is cheap and convenient.

Bank Bills Dangerous.—Avoid wetting the humb and finger in handling bills. Small pox is sometimes inoculated in this way, from a note in the pocket of a person having the disease.

DODGING A TAX.—Massachusetts, at one time laid a ax upon advertisements, which was very unpopular, nd many ingenious expedients were resorted to, to evade he tax. Here is one of them. The Essex Journal (Mass.) ublished by John Mycall, in the issue for Jan. 4th, 1786, ontained among other *editorial* items the following: 'The journals of other States come to us filled with advertisements; but on account of the *Stamp Act* here, we an not advertise our own goods, *though I have for sale Bibles and Testaments, primers, almanacs, stationery and many other useful things, and an excellent 'Moral Discourse,' the price of which being only eight pence*, will not afford profit enough for paying the tax."

NEW AND VALUABLE BOOKS.

[Any books noticed in these columns, or any other *good* book, we shall be happy to send *post-paid*, to any of our readers who can not conveniently get them elsewhere, if they send us the regular retail price. The discount usually allowed us by publishers about pays the expense of postage, procuring and forwarding.]

AMERICAN SHORT HORN HERD BOOK. VOL. IV. By LEWIS F. ALLEN, 1859. Octavo. pp. 608.

This splendid continuation of the record of the pedigrees of our American Short Horns came to us a few days ago with the promptitude which has marked its previous volumes in the hands of its energetic and capable compiler, well printed and bound; and illustrated with some fifty portraits of living animals—besides two superb engravings; one, of the best bull ever produced in England; and the other, the fattest American cow on record. There are 3,000 pedigrees in the book, more than one-third of which are bulls, the remainder cows and heifers, a living testimony to the present and increasing value of our herds of Short Horns. The book is mainly useful to cattle breeders; but as a matter of taste and interest, it may well embellish the table of every breeder of good animals throughout the country. Its pages enumerate more than six hundred American breeders of this noble breed of cattle, and the number is increasing with every succeeding year, as their value becomes more widely known.. The book can be had from its compiler, either by express at $5, or by mail, post-paid, for $5 50, remitted to him at Black Rock, N. Y.

MILCH COWS AND DAIRY FARMING.—The author of this work, Chas L. Flint, Esq., Secretary of the Mass. Board of Agriculture, takes hold of any enterprize with a zeal and energy exhibited by few. His annual reports on the Agriculture of Massachusetts, are models, and contain a well digested mass of information collected with great labor from all parts of the State. The subject of the book before us, is, perhaps, not one to which Mr. Flint could best have directed his talents, at least it has been somewhat criticised by old cattle breeders, but it contains very much instruction for every one engaged in dairying, or who even owns a cow, and may well be in the hands of all such. The author has sought his materials for the important subjects of which he treats from the latest authorities abroad as well as at home, and has thus been able to give the latest discoveries, improvements, and practice in dairy management. In thus doing he has collected and condensed in a pleasing form much valuable information, hitherto unavailable to the American public. The chapter on the Dutch Dairy, and M. Magnes' more clear, simple, and brief explanation of the Guenon method, are translations by the author from the German and French. The illustrations of the milk stand, pans, churns, butter workers, cheese presses, cool baths, shelves, etc., are excellent. A. O. Moore & Co., New-York. Price $1 25.

HINTS TO HORSE KEEPERS.—HERBERT. Capital hints they are, so far as written by that veteran lover of horses, the late Henry W. Herbert, whose authorship extends through the first thirteen chapters, which embrace nearly one half of the volume. The remaining half is judiciously arranged matter; and all of it is important to the farmer and the gentleman who wishes to select his team with judgment, and keep them and their gear and vehicles in first-rate condition. Unless the owner of horses has the information in some other form, (and we don't know where it is to be found elsewhere so comprehensive and condensed) he ought not to be without "Hints to Horsekeepers." Published by A. O. Moore & Co. Price $1 25.

Market Review, Weather Notes, &c.

AMERICAN AGRICULTURIST OFFICE,
NEW YORK, Saturday Evening, June 18, 1859.

The trade in Breadstuffs has been restricted, during the past month. The demand for Flour has been mainly for lots wanted by the regular trade, who have purchased only as they have been in want of supplies for home consumption. The inquiry from speculators has been limited. The news from Europe, received since our last, has not tended to encourage speculative operations. The advices from the West, within the past two weeks, representing the Wheat, Corn, Vegetable and Fruit crops, as having been seriously injured by frost, had, at one time, the effect of stimulating some buyers to purchase rather extensively. In the main, however, dealers have considered the reports of general and very serious injuries as greatly and designedly exaggerated; and recently the demand for Flour has been limited, while it was freely met by holders at reduced prices. It now begins to appear, that the mischief really done by the June frosts, of which so much has been said, is neither very wide spread nor irreparable. Farmers of intelligence and experience did not need to be told, from the first, that had the prostration of the growing crops been as severe as it was stated to be, the season was still not too far advanced for profitable replanting; and the great body of dealers in cereals and breadstuffs never for a moment wavered under the influence of the abortive panic. The most biting effects of the disaster appear now to have been mainly confined to a small region of our own State, and to the upper part of Wisconsin. In Canada, Illinois and Northern Ohio it is even an open question whether the wheat harvest will not on the whole be improved by this sharp "counterblast to the flies." In the actual uncertainty of affairs abroad, anything like a positive disaster overtaking our American agriculture would have been a misfortune to the whole world. We may, therefore, honestly rejoice that the prospects of our Western country are still such as to promise us a busy season of widely-developed and remunerative commercial activity....Wheat has been quite sparingly purchased, though it has been offered at much lower rates....Corn has been depressed, and has declined materially....Rye, Barley, and Oats have been in slack demand, though decidedly lower....Cotton has been unsettled, but closes with more inquiry for desirable lots at strengthening prices. The available supply here is 81,607 bales, against 88,104 bales same time in 1858. The receipts at all the shipping ports to latest dates, this season, have been 3,608,398 bales, against 2,947,990 bales to the corresponding period of last season. The total exports from the United States so far this season have been 2,709,989 bales, against 2,205,652 bales to the same date last season. The total stock on hand and on shipboard in the shipping ports at the latest dates was 345,754 bales against 432,716 bales at the same time last year. The stock in the interior towns at the latest dates was 81,111 bales, against 59,416 bales at the corresponding date a year ago.....The movements in Provisions and groceries have been less extensive, and prices have favored buyers....Hay has been more freely offered and purchased at reduced rates....Hemp, Hops, and Seeds, have a limited demand....Tobacco has attracted less attention....Naval Stores have been actively inquired for at buoyant prices....Wool is in very slack request, either on speculation or for manufacturing. The current receipts of the new clip are light. Receivers do not appear to be very anxious to sell, nor are buyers eager to purchase. Prices are, as yet, wholly unsettled—parties differing widely in their views—no sales have been effected of sufficient magnitude to give anything like regularity or reliability to quotations. Old domestic is quite scarce, but is partially neglected, and prices are easier and irregular. Foreign Wool is depressed. A large portion of the available supply is composed of undesirable lots, for which the inquiry is spiritless. The private advices from the country report rather an unsettled state of affairs as yet, and no movements of any consequence. Manufacturers, dealers and speculators are ready to purchase the new wool at the prices of last year, but the views of growers are generally 5c. ℔ lb. above this mark—say about 45c. for the average of Ohio fleece, and 40c.@43c. for Michigan. Both parties appear to be firm in their views, are holding back, and active movements are not looked for at present, as the unsettled state of European affairs, and the prospect of large receipts of both Wool and goods, will prevent manufacturers from making any extensive purchases.... Other branches of the Produce Trade have exhibited no very remarkable changes.

TRANSACTIONS AT THE N. Y. MARKETS.

RECEIPTS.	*Flour.*	*Wheat.*	*Corn.*	*Rye.*	*Barley.*	*Oats.*
26 bus. days *this* mon.	225,000	81,500	226,500	11,500	24,000	266 360
22 bus. days *last* mon	152,000	18,250	155,000	6,500	89,714	150,000
SALES.	*Flour.*	*Wheat.*	*Corn.*	*Rye*	*Barley.*	
26 business days *this* month.	235,000	239,250	521,700	43.800	19.000	
22 business days *last* mon,	419,000	340,000	610,000	41,900	180,000	

Breadstuffs exported from N. Y., from Jan. 1 to June 13.

	1858.	1859.
Wheat Flour, bbls	635,890	280,950
Rye Flour, bbls	3,420	3,132
Corn Meal, bbls	34,952	38,223
Wheat, bush	1,503,986	21,918
Corn, bush	1,389,957	90,930

CURRENT WHOLESALE PRICES.

	May 18.	June. 18.
FLOUR—Superf to Extra State	$6 10 @ 7 70	$6 20 @ 6 90
Common to Fancy Western	6 20 @ 7 30	6 25 @ 6 80
Extra Western	7 35 @10 00	6 75 @10 00
Fancy to Extra Genesee	7 60 @ 9 50	7 15 @ 9 50
Mixed to Extra Southern	7 40 @10 00	7 20 @ 9 50
RYE FLOUR—Fine and Super.	4 35 @ 6 10	4 60 @ 5 20
CORN MEAL	4 30 @ 4 75	4 20 @ 4 50
WHEAT—Canada White	None offering.	None offering.
Western White	1 60 @ 2 10	1 55 @ 1 90
Southern White	1 80 @ 2 10	1 70 @ 2 00
All kinds of Red	1 00 @ 1 95	90 @ 1 70
CORN—Yellow	96 @ 99	87 @ 90
White	94 @ 98	85 @ 89
Mixed	93 @	84 @ 86
OATS—Western	61 @ 62½	50 @ 52
State	58 @ 61	48 @ 5 5½
Southern	50 @ 56	43 @ 47
RYE	1 02 @ 1 04	97 @ 98
BARLEY	62½@ 80	60 @ 72½
White Beans	1 10 @ 1 20	1 10 @ 1 25
HAY, in bales, per 100 lbs	70 @ 85	60 @ 75
COTTON—Middlings, per lb	11 @ 11¼	11¼ @ 12
RICE, per 100 lbs	3 75 @ 5 25	3 75 @ 5 00
HOPS, crop of 1858 per lb	8 @ 14	9 @ 16
PORK—Mess, per bbl	18 50 @	@17 00
Prime, per bbl	@15 50	@15 00
BEEF—Repacked Mess	11 00 @15 00	9 25 @13 50
Country mess	8 37 @10 75	8 00 @ 9 25
Hogs, Dressed corn, per lb	8 @ 8½	8¾ @ 8¾
Lard, in bbls. per lb	12¼@ 12¾	11 @ 11½
BUTTER—Western, per lb	8 @ 16	12 @ 17
State, per lb	18 @ 22	15 @ 19
CHEESE, per lb	6 @ 10	3 @ 9
EGGS—Fresh, per dozen	17 @ 18	14 @ 16
FEATHERS, Live Geese per lb	42 @ 54	48 @ 55
SEED—Clover, per lb	7½@ 8¼	8 @ 9
Timothy, per bushel	2 25 @ 2 75	2 00 @ 2 75
SUGAR, Brown, per lb	5¾@ 7¾	5 @ 7¼
MOLASSES, New-Orleans, pr gl	42 @ 45	36 @ 42
COFFEE, Rio, per lb	10½@ 12¼	10 @ 12
TOBACCO—Kentucky, &c. pr lb	6¾@ 13	6 @ 13
Seed Leaf, per lb	6 @ 25	6 @ 25
WOOL—Domestic fleece, per lb	38 @ 52	34 @ 55
Domestic, pulled, per lb	30 @ 52	30 @ 50
HEMP—Undr'd Amer'n pr ton	140 @163	140 @150
Dressed American, per ton	195 @225	190 @210
TALLOW, per lb	11¼@	10¾@ 11
OIL CAKE, per ton	31 00 @39 00	35 00 @41 00
POTATOES—Peach Blow, pr bbl	2 00 @ 2 75	2 00 @
Mercers, per bbl	1 50 @ 2 25	1 50 @ 2 00
Bermudas, new, per bbl	4 00 @ 4 50	3 50 @ 4 00
ASPARAGUS, per dozen	1 50 @ 3 00	88 @ 1 00
APPLES—Dried, Per lb	8½@ 9	7¾@ 8
Dried Peaches—pr lb, South'n	12 @ 16	10 @ 14
POULTRY—Fowls, per lb	10 @ 12½	12½@ 13
Ducks, per lb	16 @ 18	12 @ 14
Turkeys, per lb	16 @ 17	12½@ 13
Geese, per lb	12 @ 15	16 @

N. Y. Live Stock Markets.—THE CATTLE MARKETS have been moderately supplied during the past four weeks, and prices have mainly ruled high. The receipts for the past month amount to 14,438, or about 1,400 more than for the previous month. The full supply on the 15th during the hight of strawberries, caused a decline, so that prices ranged at 12c.@12½c. ℔ lb. net weight, for premium grades, 11c.@11½c.; for first quality, 9½c @10½c.; for medium animals, 7½c.@9c.; for poor qualities the market closing heavily.

VEAL CALVES continue abundant. For the past four weeks 4,664 have been received. The best calves are now worth 6c.@6½c. with a very few at 7c. ℔ lb. live weight. Ordinary veals are dull at 5c. The market was overstocked on the last sales day.

SHEEP AND LAMBS.—Receipts of live sheep have been larger, especially during the past week. For the four weeks just ended, the numbers were 28,625, against 15,009 for the previous month. During the week ending, June 15th, the city reports were 10,143. Prices have fallen off materially; and good fat sheep are now selling for 5c. ℔ lb. live weight, and Spring lambs at 6c.@9c. Besides a slow market and low prices, large numbers remained unsold.

HOGS.—Receipts for the four weeks just ended amount to 24,002, which is quite sufficient for the wants of the market during the heat of Summer. Prices are a little

higher than last month, or 6½c.@7c. ℔ lb. for live weight for corn fed, and 6½c.@6½c. for still-fed hogs.

The Weather, during the past four weeks, has been variable. Beginning where we left off last month, it was first wet, then very warm, followed by a frost, which was quite severe in many places, afterwards fine and warm, then another cold spell, and hot again with showers, and a rain storm, as we go to press. OUR DAILY NOTES condensed read: *May* 20, cloudy, light rain—21, raw day, heavy rain at night—22, showery—23 to 26, clear and fine growing weather—27, warm, shower at night—28 to 30, clear and fine—31, cloudy, rain at night. *June* 1, cloudy with light rain—2, cloudy—3, heavy thunder showers—4, cool, with moderate rain—5, clear and cool, heavy frost in the morning, in some localities doing considerable damage to growing crops—6, clear, and still cold, with more frost and ice even—7 to 10, clear and fine, but cool, heavy showers at night on the 10th—11, 12, clear and cool—13, cloudy, with light rain at night of 13th—14, 15, clear, fine and *hot*—16, showery, warm—17 rainy day.

Reports on the Crops.

The following extracts from the business correspondence of the *American Agriculturist*, will give some general idea of the impressions of farmers in various parts of the country in regard to the grain, grass and fruit prospects in the several localities named.

Barnstable Co., Mass. Lat. 41½°, June 14—Henry F. Gifford....Corn and other grain, and grass look very well. But little damage done by frost.

Montgomery Co., N.Y. Latitude 40°, June 12—M. Quinby....Five frosts since June 4....Very severe on 11....Corn generally killed, patches half killed....Tender garden vegetables all killed.

Suffolk Co., N. Y. Lat. 41°—P. H. Foster:....Corn coming forward, although rather cold for it. Wheat, Rye and oats very fine. Grass very good. Fruit except strawberries, poor.

Rockland Co., N. Y. Lat. 41°, June 13—C. G. C.... Corn, backward....Oats Grass, Rye and Potatoes, fair ....Apples and Pears about half a crop of Summer varieties, and few Winter apples. Cherries, poor. Plums, scarce. Blackberries, promise of abundance.

Niagara Co., N. Y. Lat. 43°, June 13—A. E. Raymond ....The prospects for grain, fruit, and vegetables was very fine up to June 4, when the severe frost almost lasted every hope of anything like fair crops. Corn and potatoes were cut to the ground. In some sections, Wheat, Rye, and Winter Barley were so damaged that armers are cutting for fodder.....Another frost on the 10th killed all the corn that had sprouted after the first disaster. The farmers faces look very long.

Niagara Co., N. Y. Lat. 43°, June 5—Mrs. E. Williams....Damage from frost very great.

Cayuga Co., N. Y. Lat. 43°, June 12—Wm. C. St. John....Wheat, prospect good....Barley and Oats, poor ....Corn looks well considering the cool weather; somewhat injured by frosts on 10 and 11. Garden vegetables much damaged by frost.

Jefferson Co., Pa. Lat. 41°, June 11—Thomas Houson....Winter grain mostly cut off by frosts....Corn and potatoes greatly damaged. The frost of June 10 cut off the second growth which corn had made after the first frost.

Clarion Co., Pa. Lat. 41—John Wilson....The frost of June 4th cut the Corn, Potatoes, garden vegetables and fruits badly. Wheat and Rye were also damaged. Some have cut the green grain and sowed Buckwheat. June 11, another hard damaging frost.

Mercer Co., Pa. Lat. 41½°, June 7—J. A. Nelson.... Good promise for grain and fruit crops until June 4, when the frost did much injury. Many fields of Wheat and Rye look as white as when ripe, and will scarcely be worth cutting, and the best will be very light....Corn and potatoes cut to the ground....Fruit except apples, badly injured.

Logan Co., O. Lat. 40½°, June 3—Solomon Shawver ....Wheat injured by wet weather of Winter and Spring. About half a crop expected....Corn, very good....Oats, poor.

Huron Co., O. Lat. 41°, June 6—J. O. Strong....Wheat looking well....Corn and garden vegetables cut to ground by frost....Oats doing well.

Mahoning Co., O. Lat. 41°, June 6—Mrs. B. F. Lee ....Garden vegetables ruined by hard frost 4 inst.

Davies Co., Ind. Lat. 30°, June 7—W. R. Sherman ....Wheat good, prospects above average....Oats not extensively sown, but fair crop looked for....Corn, planted very largely, cold weather has kept it back, but chance yet for large crops....Fruit, fair.

Delaware Co., Ind. Lat. 40°, June 2—Jno. C. Helm ....Wheat thin on the ground, but looks well, crops injured by bad seed sown, many having used Wheat too shrunken for market. Corn largely planted and looking well.

Wayne Co., Ind. Lat. 40°, May 31—J. Commons.... Wheat, promise of an average crop, somewhat injured by the "Hessian Fly"....Oats with a few seasonable showers will be good. Barley the same....Corn never looked better, and an unusually large amount planted.... Potatoes fine ...Fruit enough for home consumption.

Macoupin Co., Ill. Lat. 39½°, June 11—Thomas Glenn ....Wheat will probably average 12 to 15 bushels per acre....Oats look remarkably well....Corn not very promising, injured by wet Spring and by birds....Grass rather light.

Livingston Co., Ill. Lat. 41°, June 11—S. L. Mauker, Sec. Livingston Co. Ag. Soc....Wheat, sown last Fall nearly a failure, and being plowed up and planted to Corn....Corn, very large breadth planted, looked well until cut down by frost.

Bureau Co., Ill. Lat. 41½°, June 10—H. N. Morris.... Winter wheat none to speak of, much of it plowed up. Spring Wheat badly injured by "Hessian Fly"....Corn killed to the ground, the most forward of it will not recover....Rye may yet prove fair....Fruits all killed.... Garden vegetables do. promise of 'dry living' this season.

Henry Co., Ill. Lat. 41½°, June 4—John Boans.... Spring Wheat, light. Farmers are plowing up Winter Wheat, which has been spoiled by the "Hessian Fly".. Corn has been largely planted, but is much injured by birds, vermin and the frosts....Potatoes look poor.

Clinton Co., Iowa. Lat. 42°, May 23—B. R. Palmer ....Wheat poor, thin on the ground, sowed late, the Spring being wet, and weeds have the start of it. With all things favorable may have ⅓ of a crop.

St. Joseph Co., Mich. Lat. 42°, June 5—Wheat rather thin on ground, but promises to be a medium crop. Oats very small and thin. Corn came up well but was injured by frost of 4. Grass thick but short.

Calhoun Co., Mich. Lat. 42½°, June 11—Charles M. Keep....Wheat promises an average crop....Barley very poor....Oats light....Corn backward, damaged to some extent by worms and the frosts of June 4 and 10.

Macomb Co., Mich. Lat. 43°, June 2—E. Wright Hall....Large amount Spring crops put in, which look promising. Wheat not much sown for fear of midge. Rye more generally sown and looks fine.

Nassau Co., Fla. Lat. 30½°, June 7—Josiah A. Lewis ....Cotton flourishing, commenced blossoming on 5.... Corn, good.

The Turnip Seed Premium,

Noted on page 224, will be found worthy of attention. We shall probably have seed enough for all who apply for it during July. The premium parcels offered will suffice to produce from 30 to 100 bushels; the amount of crop will of course depend upon the condition of the soil, and the care in sowing and cultivation. We think all who raise a field of these turnips for family use will be so pleased with them that they would think the seed cheap, even if it cost the dollar, without the subscription.

Is it Worth the Money?

We would be glad to have every reader look back over the pages of this single number, and then ask himself, or herself, whether the *Agriculturist* for a whole year is *worth* the small subscription price, and if it is, please state the fact to a friend or neighbor. We were just looking over some previous numbers and volumes, and confess to a little feeling of pride at the improvements made within a year or two. We expect to go ahead, and not backward. If the paper has been good in the past, it shall be *better* in the future.

This number begins the second half of the volume, and now is a good time to begin new subscriptions for a year, or for half a year, where it is desired.

New Premium Lists can Begin Now.

In answer to several enquiries, we reply that we shall, the coming Autumn, offer as liberal premiums for NEW subscribers, as those offered the past year. We have not yet arranged the premium list in full, but it will embrace the more valuable premiums hitherto offered, and several new ones, including Mowing Machines and other Farm Implements, etc., etc. We will now say, that any person may at once commence making up a new list of subscribers, and all new names sent in for one year may be counted in, whether the subscriptions commence with the July number or next January. This offer gives the canvasser the double chance, of getting new names to begin now, and also in January. Two half yearly subscribers will count the same as one for a whole year.

When names are sent to be included in premium lists, a duplicate list should be sent at the same time, to be kept on a separate file, for reference in making up the final award at any time when the list is complete.

During the past year we have given out over *six hundred* valuable premiums. A great number of families are now in possession of a Sewing Machine, a splendid Dictionary, or a Microscope, etc., which they have obtained without any actual outlay of money How many others will be equally fortunate next Winter, or before, in getting, on as easy terms, one of these articles, or a valuable farm implement? It is not too early to begin the work now, of collecting and sending in the names, as every name will count.

It will be noticed that our premiums are absolute, and not in any case dependent upon competition, or upon what some other unknown individual is doing, so that every person understands exactly what he or she is working for, and what is the point to be reached. These premiums are offered as *pay* for time and effort expended in bringing the *Agriculturist* before those unacquainted with it—and *not* in the manner of a gift enterprise. What others pay in commissions to agents, we pay out in this form.

Bound Volumes—Binding—Covers.

Any copy of the Agriculturist, dated after 1856, can always be supplied.

We have bound sets, of Vols. XVI and XVII, singly, and also both volumes in one cover. The prices of these are:

Vol. XVI, or Vol. XVII, *unbound*, $1.00 each.
do do *neatly bound*, $1.50 each.
Volume XVI and Vol. XVII neatly bound in one cover, $2.00
Cost of Vols. XVI and XVII bound together and sent by mail post-paid $3.40.

N. B.—These volumes *unbound* will be sent by mail, pre-paid, for $1.12 per volume. If *bound* the postage (which must be pre-paid) is 42 cents for volume XVI, and 50 cents for Vol. XVII—making the cost of Vol. XVI bound and *sent pre-paid by mail*, $1.92, and of Vol. XVII, $2.00.

Of Vol. XV, we have no copies, and unfortunately, no stereotype plates.

Of Vols. XII, XIII and XIV, we have some sets bound and unbound, at the same prices as named above for Vols. XVI and XVII.

BINDING.—Sets of numbers brought to this office will be bound up neatly (in our regular style of binding the *Agriculturist*) for 50 cents a volume. Vols. XVI and XVII will be bound together in one cover for 60 cents.

PREPARED COVERS.—Stamped Muslin Covers, neatly made, with names, &c., gilt upon the back, and ready for the insertion of the sheets by any book-binder, can be furnished for Vols. XII to XVII inclusive, at 25 cents per volume. They can not well go by mail.

☞The circulation of the Agriculturist to regular subscribers, is much larger than that of any other Agricultural or Horticultural Journal in the world.

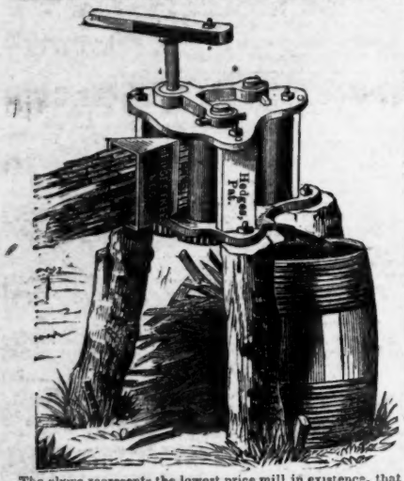
COOK'S PATENT
SORGHUM SUGAR EVAPORATOR.

The only successful, complete, and cheap Evaporator adapted to the Sorghum Cane known. It takes in the fresh juice continuously at one end, and gives off the finished syrup at the other—but 20 to 30 minutes being required to reduce to the granulating point. It is furnished complete, at $35, including furnace and chimney. The entire apparatus is constructed of wrought iron, the face being galvanized, and weighs about 200 pounds.

HEDGES, FREE & CO., of Cincinnati, O., manufacture, and are authorized to sell the Pans, or State, County, or Shop Rights.

D. M. COOK, Patentee.

CHINESE SUGAR CANE MILL.



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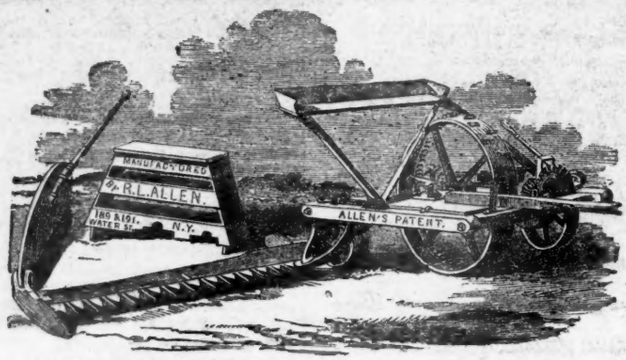

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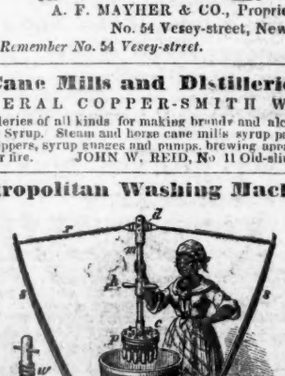

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Middlefield, Connecticut, June 15, 1859.

Contents for July, 1859.

Business Notices.

☞ *Fifty Cents a Line of Space.*

Agricultural Exhibitions for 1859.

Partial lists of the time and place of holding State and County Exhibitions have been received, but as it is desirable to make the statement as complete as possible, publication is deferred until the August number. Will the Officers of Agricultural Associations from whom we have not heard, do us the favor to forward the information needed immediately. If a paper containing the announcement is sent, please mark the notice plainly, that it may not be overlooked.

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